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stn


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TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  AUG 15  CAOLD to be discontinued on December 31, 2008
 NEWS  3  OCT 07  EPFULL enhanced with full implementation of EPC2000
 NEWS  4  OCT 07  Multiple databases enhanced for more flexible patent
                  number searching
 NEWS  5  OCT 22  Current-awareness alert (SDI) setup and editing
                  enhanced
 NEWS  6  OCT 22  WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT
                  Applications
 NEWS  7  OCT 24  CHEMLIST enhanced with intermediate list of
                  pre-registered REACH substances
 NEWS  8  NOV 21  CAS patent coverage to include exemplified prophetic
                  substances identified in English-, French-, German-,
                  and Japanese-language basic patents from 2004-present
 NEWS  9  NOV 26  MARPAT enhanced with FSORT command
 NEWS 10  NOV 26  MEDLINE year-end processing temporarily halts
                  availability of new fully-indexed citations
 NEWS 11  NOV 26  CHEMSAFE now available on STN Easy
 NEWS 12  NOV 26  Two new SET commands increase convenience of STN
                  searching
 NEWS 13  DEC 01  ChemPort single article sales feature unavailable

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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Updated Search
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stn


FILE 'HOME' ENTERED AT 06:01:08 ON 08 DEC 2008

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'REGISTRY' ENTERED AT 06:01:29 ON 08 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES:    5 DEC 2008  HIGHEST RN 1080697-25-1
DICTIONARY FILE UPDATES:   5 DEC 2008  HIGHEST RN 1080697-25-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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Uploading C:\Documents and Settings\brobinson1\My Documents\342a.str

L1      STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 06:03:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      356 TO ITERATE

100.0% PROCESSED      356 ITERATIONS                                15 ANSWERS
SEARCH TIME: 00.00.05

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         5988 TO     8252
PROJECTED ANSWERS:              68 TO      532

L2           15 SEA SSS SAM L1

=> s l1 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 06:04:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     6658 TO ITERATE



Updated Search
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100.0% PROCESSED     6658 ITERATIONS                          277 ANSWERS
SEARCH TIME: 00.00.01

L3          277 SEA SSS FUL L1

=> file hcaplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             179.74     179.95

FILE 'HCAPLUS' ENTERED AT 06:04:08 ON 08 DEC 2008
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 8 Dec 2008  VOL 149 ISS 24
FILE LAST UPDATED: 7 Dec 2008  (20081207/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s l3
L4          29 L3

=> s l4 and trotter, b?/au
            53 TROTTER, B?/AU
L5           4 L4 AND TROTTER, B?/AU

=> d l5, ibib abs hitstr, 1-4

L5   ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2006:1252121  HCAPLUS
DOCUMENT NUMBER:          146:142484
TITLE:                    Design and Synthesis of Novel Isoquinoline-3-nitriles
                          as Orally Bioavailable Kv1.5 Antagonists for the
                          Treatment of Atrial Fibrillation
AUTHOR(S):                Trotter, B. Wesley; Nanda, Kausik K.; Kett,
                          Nathan R.; Regan, Christopher P.; Lynch, Joseph J.;
                          Stump, Gary L.; Kiss, Laszlo; Wang, Jixin; Spencer,
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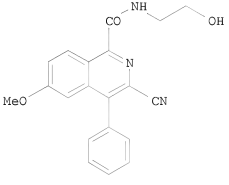
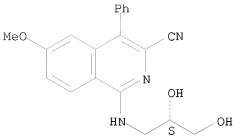
Robert H.; Kane, Stefanie A.; White, Rebecca B.; Zhang, Rena; Anderson, Kenneth D.; Liverton, Nigel J.; McIntyre, Charles J.; Beshore, Douglas C.; Hartman, George D.; Dinsmore, Christopher J.
CORPORATE SOURCE: Departments of Medicinal Chemistry, Stroke, and Neurodegeneration Automated Biotechnology Pain Research, and Drug Metabolism, Merck Research Laboratories, West Point, PA, 19486, USA
SOURCE: Journal of Medicinal Chemistry (2006), 49(24), 6954-6957
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:142484
GI



AB Novel 3-cyanoisoquinoline Kv1.5 antagonists have been prepared and evaluated in in vitro and in vivo assays for inhibition of the Kv1.5 potassium channel and its associated cardiac potassium current, IKur. Structural modifications of the isoquinolinone lead afforded compds. (e.g. I) with excellent potency, selectivity, and oral bioavailability.
IT 849546-23-2P 849546-30-1P 849547-28-0P
849548-50-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of isoquinoline-3-nitriles as orally bioavailable Kv1.5 antagonists for the treatment of atrial fibrillation)
RN 849546-23-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2S)-2,3-dihydroxypropyl]amino]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

stn



RN 849546-30-1 HCAPLUS
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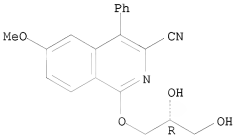
Absolute stereochemistry.



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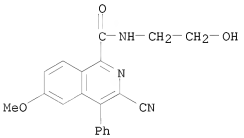

RN 849548-50-1 HCAPLUS
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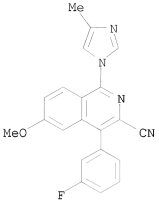
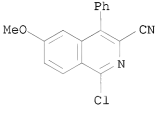
Updated Search

stn



IT 849546-10-7P 849546-11-8P 849546-26-5P
849546-48-1P 849547-30-4P 849549-26-4P
849549-27-5P, 4-(3-Fluorophenyl)-6-methoxy-1-oxo-1,2-dihydroisoquinoline-3-carbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of isoquinoline-3-nitriles as orally bioavailable Kv1.5 antagonists for the treatment of atrial fibrillation)

RN 849546-10-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-chloro-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849546-11-8 HCAPLUS
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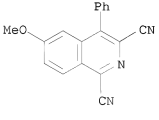
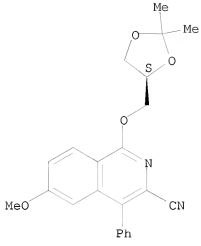


RN 849546-26-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

stn

Absolute stereochemistry.



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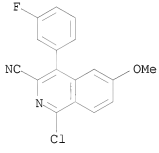

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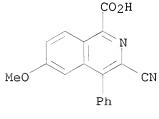
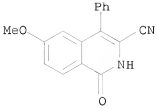


RN 849549-26-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1,2-dihydro-6-methoxy-1-oxo-4-phenyl- (CA INDEX NAME)

Updated Search



RN 849549-27-5 HCAPLUS
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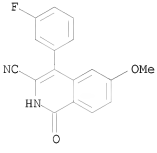

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:300465 HCAPLUS
DOCUMENT NUMBER: 142:373705
TITLE: Preparation of isoquinoline derivatives as potassium channel inhibitors
INVENTOR(S): Trotter, B. Wesley; Claiborne, Christopher; Ponticello, Gerald S.; McIntyre, Charles J.; Liverton, Nigel; Claremon, David A.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030791	A2	20050407	WO 2004-US30431	20040917
WO 2005030791	A3	20050526		

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NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

AU 2004276236	A1	20050407	AU 2004-276236		20040917
AU 2004276236	B2	20080124			
CA 2539814	A1	20050407	CA 2004-2539814		20040917
EP 1667982	A2	20060614	EP 2004-788811		20040917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK					
CN 1856476	A	20061101	CN 2004-80027369		20040917
JP 2007516218	T	20070621	JP 2006-528067		20040917
IN 2006DN01030	A	20070817	IN 2006-DN1030		20060227
US 20070027177	A1	20070201	US 2006-571870		20060315
PRIORITY APPLN. INFO.:			US 2003-505101P	P	20030923
			WO 2004-US30431	W	20040917

OTHER SOURCE(S): CASREACT 142:373705; MARPAT 142:373705

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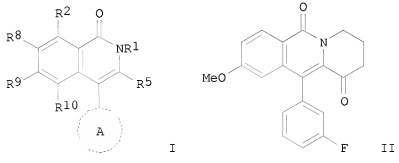


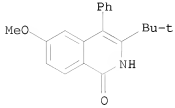
AB Title compds. represented by the formula I [wherein ring A = (un)substituted (hetero)aryl; R1 = H, (cyclo)alkyl, (alkyl)amino, etc.; R2, R8-R10 = independently H, halo, aminocarbamoyl, etc.; R5 = H, halo, (cyclo)alkyl, etc.; or R1R5 = (un)substituted cyclic ring; and pharmaceutically acceptable salts, crystal forms or hydrates thereof] were prepared as potassium channel inhibitors. For example, reaction of 2-(3-fluorobenzoyl)-4-methoxybenzoyl chloride with piperidin-3-one•HCl gave II. I provide ≥20 % inhibition at a concentration of 33 μM or less in the high throughput Kv1.5 planar patch clamp assay and ≥25 % inhibition at a concentration of 25 μM or less in the AAS (Atomic Absorption Spectroscopy) assay. Thus, I and their pharmaceutical compns. are useful as potassium channel inhibitors for the treatment of cardiac arrhythmias, and the like.

IT 849424-93-7P 849424-95-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)

RN 849424-93-7 HCAPLUS

stn

CN 1(2H)-Isoquinolinone, 3-(1,1-dimethylethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849424-95-9 HCAPLUS
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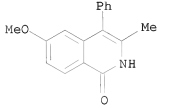

L5 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:300412 HCAPLUS
DOCUMENT NUMBER: 142:373702
TITLE: Preparation of isoquinoline derivatives as potassium channel inhibitors
INVENTOR(S): Isaacs, Richard; Dinsmore, Christopher J.; Trotter, B. Wesley; Liverton, Nigel; Beshore, Douglas C.; Kett, Nathan R.; McIntyre, Charles J.; Nanda, Kausik K.; Claremon, David A.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030729	A1	20050407	WO 2004-US30945	20040922

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

Updated Search

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2004276268	A1	20050407	AU 2004-276268 20040922
CA 2539546	A1	20050407	CA 2004-2539546 20040922
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PRIORITY APPLN. INFO.: US 2003-505216P P 20030923
WO 2004-US30945 W 20040922

OTHER SOURCE(S): CASREACT 142:373702; MARPAT 142:373702

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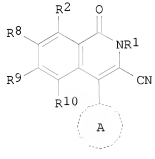

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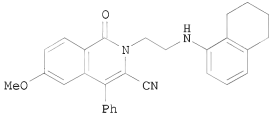
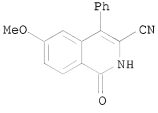


II

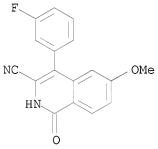
AB Title compds. represented by the formula I [wherein ring A = (un)substituted (hetero)aryl; R1 = H, (cyclo)alkyl, (alkyl)amino, etc.; R2, R8-R10 = independently H, halo, aminocarbamoyl, etc.; and pharmaceutically acceptable salts, crystal forms or hydrates thereof] were prepared as potassium channel inhibitors. For example, II was given in a multi-step synthesis starting from the reaction of p-anisoyl chloride with aniline. I provide ≥20 % inhibition at a concentration of 33 μM or less in the high throughput Kv1.5 planar patch clamp assay and ≥25 % inhibition at a concentration of 25 μM or less in the AAS (Atomic Absorption Spectroscopy) assay. Thus, I and their pharmaceutical compns. are useful as potassium channel inhibitors for the treatment of cardiac arrhythmias, and the like.

stn

IT 849549-26-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)
RN 849549-26-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1,2-dihydro-6-methoxy-1-oxo-4-phenyl- (CA INDEX NAME)



IT 849549-27-5P, 4-(3-Fluorophenyl)-6-methoxy-1-oxo-1,2-dihydroisoquinoline-3-carbonitrile 849549-29-7P, 4-(2-Fluorophenyl)-6-methoxy-1-oxo-1,2-dihydroisoquinoline-3-carbonitrile
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)
RN 849549-27-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1,2-dihydro-6-methoxy-1-oxo- (CA INDEX NAME)



RN 849549-29-7 HCAPLUS
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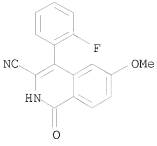
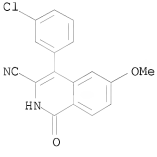
Updated Search

stn



IT 849635-33-2 849635-44-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)
RN 849635-33-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1,2-dihydro-6-methoxy-1-oxo- (CA INDEX NAME)



RN 849635-44-5 HCAPLUS
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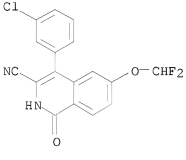

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

Updated Search

stn

ACCESSION NUMBER: 2005:300191 HCAPLUS
DOCUMENT NUMBER: 142:373697
TITLE: Preparation of isoquinoline derivatives as potassium channel inhibitors
INVENTOR(S): Trotter, B. Wesley; Nanda, Kausik K.; Kett, Nathan R.; Dinsmore, Christopher J.; Ponticello, Gerald S.; Claremon, David A.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030130	A2	20050407	WO 2004-US30486	20040917
WO 2005030130	A3	20060119		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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CA 2539479	A1	20050407	CA 2004-2539479	20040917
EP 1667979	A2	20060614	EP 2004-784370	20040917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1856475	A	20061101	CN 2004-80027385	20040917
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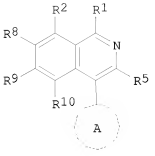
US 20060276450	A1	20061207	US 2006-572342	20060317
PRIORITY APPLN. INFO.:			US 2003-505143P P	20030923
			WO 2004-US30486 W	20040917

OTHER SOURCE(S): CASREACT 142:373697; MARPAT 142:373697
GI

Updated Search



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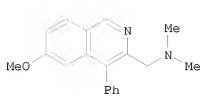


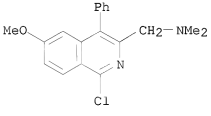
II

AB Title compds. represented by the formula I [wherein ring A = (un)substituted (hetero)aryl or heterocyclic ring; R1 = H, CN, halo, (alkyl)amino, etc.; R2, R8-R10 = independently H, halo, aminocarbamoyl, etc.; R5 = H, halo, (cyclo)alkyl, etc.; and pharmaceutically acceptable salts, crystal forms or hydrates thereof] were prepared as potassium channel inhibitors. For example, Ni-catalyzed reduction of 1-chloro-6-methoxy-4-phenylisoquinoline-3-carbonitrile and followed by condensation with formaldehyde, gave II•2HCl. I provided ≥50% inhibition at concentration ≤33 μM in the high-throughput Kv1.5 planar patch clamp assay and ≥25% inhibition at concentration ≤25 μM in the AAS (atomic absorption spectroscopy) assay. Thus, I and their pharmaceutical compns. are useful as potassium channel inhibitors for the treatment of cardiac arrhythmias, and the like.

IT 849545-74-0P 849545-76-2P 849546-10-7P
849546-11-8P 849546-13-0P 849546-17-4P
849546-26-5P 849546-28-7P 849546-48-1P
849546-58-3P 849547-30-4P 849548-92-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)

RN 849545-74-0 HCAPLUS

CN 3-Isoquinolinemethanamine, 1-chloro-6-methoxy-N,N-dimethyl-4-phenyl- (CA INDEX NAME)



RN 849545-76-2 HCAPLUS

CN 3-Isoquinolinemethanamine, 6-methoxy-N,N-dimethyl-1-(methylthio)-4-phenyl-, hydrochloride (1:2) (CA INDEX NAME)

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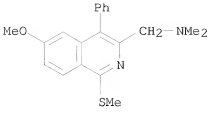

●2 HCl

RN 849546-10-7 HCAPLUS
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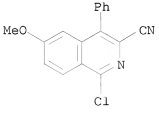

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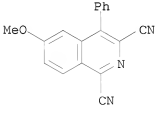
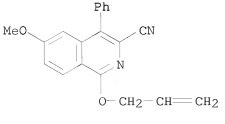


RN 849546-13-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-(2-propen-1-yloxy)- (CA INDEX NAME)



Updated Search

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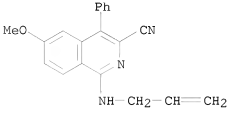
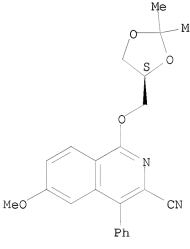
RN 849546-17-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-(2-propen-1-ylamino)-
(CA INDEX NAME)



RN 849546-26-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(4S)-2,2-dimethyl-1,3-dioxolan-4-
yl]methoxy]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

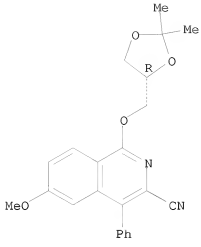


RN 849546-28-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-
yl]methoxy]-6-methoxy-4-phenyl- (CA INDEX NAME)

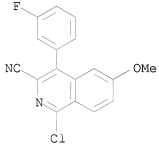
Absolute stereochemistry.

Updated Search

stn



RN 849546-48-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-chloro-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



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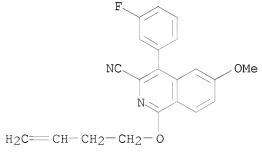
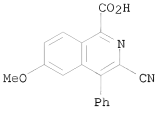


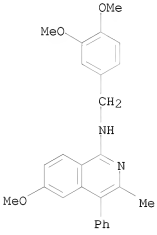
RN 849547-30-4 HCAPLUS
CN 1-Isoquinolinecarboxylic acid, 3-cyano-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

stn



RN 849548-92-1 HCAPLUS
CN 1-Isoquinolinamine, N-[(3,4-dimethoxyphenyl)methyl]-6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



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Updated Search

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849549-32-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)

RN 849545-72-8 HCAPLUS

CN 3-Isoquinolinemethanamine, 6-methoxy-N,N-dimethyl-4-phenyl-, hydrochloride (1:2) (CA INDEX NAME)

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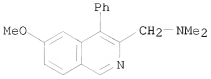
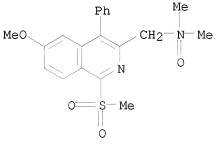
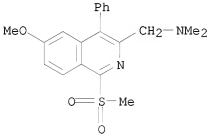


●2 HCl

RN 849545-78-4 HCAPLUS
CN 3-Isoquinolinemethanamine, 6-methoxy-N,N-dimethyl-1-(methylsulfonyl)-4-phenyl-, N-oxide (CA INDEX NAME)



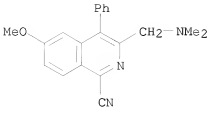
RN 849545-80-8 HCAPLUS
CN 3-Isoquinolinemethanamine, 6-methoxy-N,N-dimethyl-1-(methylsulfonyl)-4-phenyl- (CA INDEX NAME)



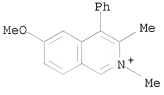
RN 849545-82-0 HCAPLUS
CN 1-Isoquinolinecarbonitrile, 3-[(dimethylamino)methyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

stn



RN 849545-84-2 HCAPLUS
CN Isoquinolinium, 6-methoxy-2,3-dimethyl-4-phenyl-, hydroxide (1:1) (CA INDEX NAME)



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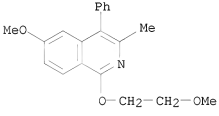
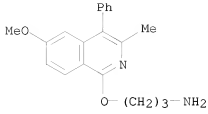
CN Isoquinoline, 6-methoxy-1-(2-methoxyethoxy)-3-methyl-4-phenyl- (CA INDEX NAME)



RN 849545-88-6 HCAPLUS
CN 1-Propanamine, 3-[(6-methoxy-3-methyl-4-phenyl-1-isoquinolinyl)oxy]-, hydrochloride (1:2) (CA INDEX NAME)

Updated Search

stn



●2 HCl

RN 849545-90-0 HCAPLUS
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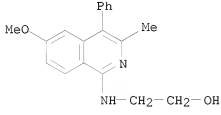
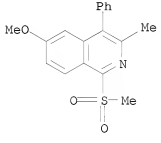


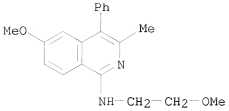
RN 849545-91-1 HCAPLUS
CN Isoquinoline, 6-methoxy-3-methyl-1-(methylsulfonyl)-4-phenyl- (CA INDEX NAME)



RN 849545-93-3 HCAPLUS
CN 1-Isoquinolinamine, 6-methoxy-N-(2-methoxyethyl)-3-methyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

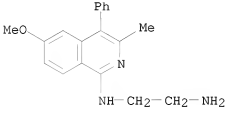
Updated Search

stn



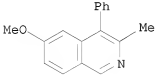
● HCl

RN 849545-94-4 HCAPLUS
CN 1,2-Ethanediamine, N1-(6-methoxy-3-methyl-4-phenyl-1-isoquinolinyl)-, hydrochloride (1:2) (CA INDEX NAME)



●2 HCl

RN 849545-95-5 HCAPLUS
CN Isoquinoline, 6-methoxy-3-methyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

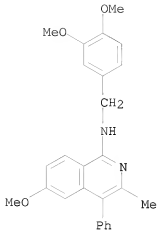


● HCl

RN 849545-97-7 HCAPLUS
CN 1-Isoquinolinamine, N-[(3,4-dimethoxyphenyl)methyl]-6-methoxy-3-methyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

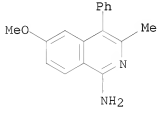
Updated Search

stn

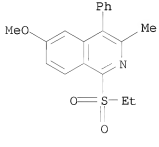


● HCl

RN 849545-99-9 HCAPLUS
CN 1-Isoquinolinamine, 6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



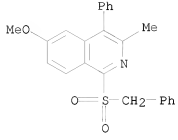
RN 849546-01-6 HCAPLUS
CN Isoquinoline, 1-(ethylsulfonyl)-6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



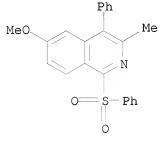
RN 849546-03-8 HCAPLUS
CN Isoquinoline, 6-methoxy-3-methyl-4-phenyl-1-[(phenylmethyl)sulfonyl]- (CA INDEX NAME)

Updated Search

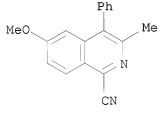
stn



RN 849546-04-9 HCAPLUS
CN Isoquinoline, 6-methoxy-3-methyl-4-phenyl-1-(phenylsulfonyl)- (CA INDEX NAME)

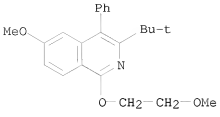


RN 849546-06-1 HCAPLUS
CN 1-Isoquinolinecarbonitrile, 6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)

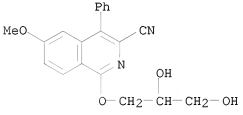


RN 849546-08-3 HCAPLUS
CN Isoquinoline, 3-(1,1-dimethylethyl)-6-methoxy-1-(2-methoxyethoxy)-4-phenyl- (CA INDEX NAME)

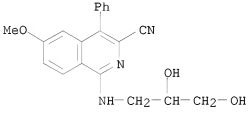
Updated Search



RN 849546-15-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(2,3-dihydroxypropoxy)-6-methoxy-4-phenyl- (CA INDEX NAME)

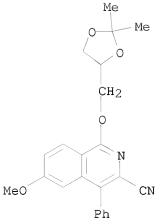


RN 849546-19-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2,3-dihydroxypropyl)amino]-6-methoxy-4-phenyl- (CA INDEX NAME)



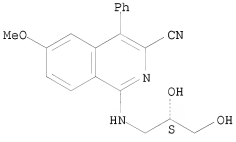
RN 849546-21-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]-6-methoxy-4-phenyl- (CA INDEX NAME)

stn



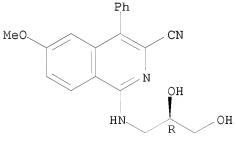
RN 849546-23-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2S)-2,3-dihydroxypropyl]amino]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 849546-25-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2R)-2,3-dihydroxypropyl]amino]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



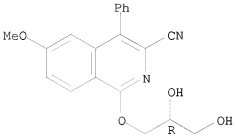
RN 849546-30-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2R)-2,3-dihydroxypropoxy]-6-methoxy-4-

Updated Search

stn

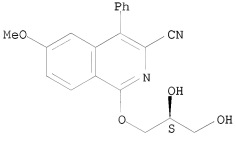
phenyl- (CA INDEX NAME)

Absolute stereochemistry.



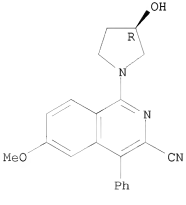
RN 849546-32-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2S)-2,3-dihydroxypropoxy]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 849546-34-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3R)-3-hydroxy-1-pyrrolidinyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

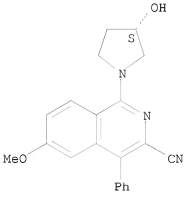


Updated Search

stn

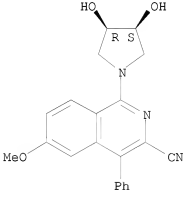
RN 849546-36-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3S)-3-hydroxy-1-pyrrolidinyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 849546-38-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3R,4S)-3,4-dihydroxy-1-pyrrolidinyl]-6-methoxy-4-phenyl-, rel- (CA INDEX NAME)

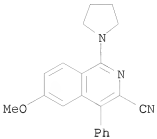
Relative stereochemistry.



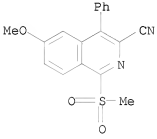
RN 849546-40-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-(1-pyrrolidinyl)- (CA INDEX NAME)

Updated Search

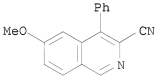
stn



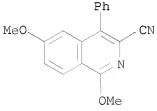
RN 849546-42-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-1-(methylsulfonyl)-4-phenyl- (CA INDEX NAME)



RN 849546-44-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849546-46-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1,6-dimethoxy-4-phenyl- (CA INDEX NAME)

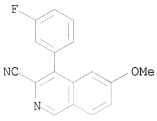


RN 849546-50-5 HCAPLUS

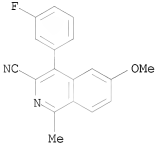
Updated Search

stn

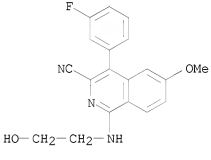
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



RN 849546-52-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-methyl- (CA INDEX NAME)



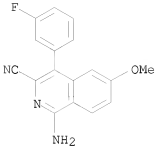
RN 849546-54-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1-[(2-hydroxyethyl)amino]-6-methoxy- (CA INDEX NAME)



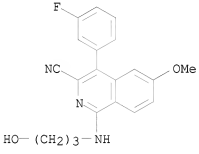
RN 849546-56-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-amino-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Updated Search

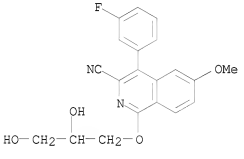
stn



RN 849546-57-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1-[(3-hydroxypropyl)amino]-6-methoxy- (CA INDEX NAME)



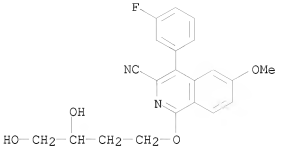
RN 849546-60-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(2,3-dihydroxypropoxy)-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



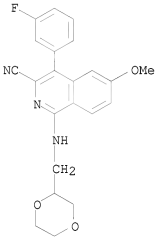
RN 849546-63-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(3,4-dihydroxybutoxy)-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Updated Search

stn



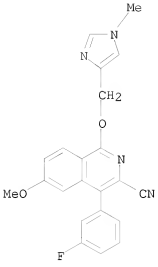
RN 849546-66-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(1,4-dioxan-2-ylmethyl)amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



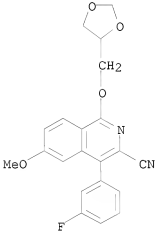
RN 849546-69-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-[(1-methyl-1H-imidazol-4-yl)methoxy]- (CA INDEX NAME)

Updated Search

stn



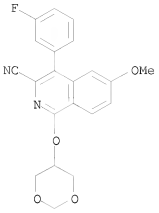
RN 849546-72-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(1,3-dioxolan-4-ylmethoxy)-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



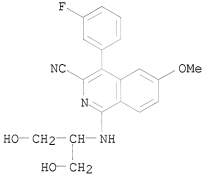
RN 849546-75-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(1,3-dioxan-5-yloxy)-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Updated Search

stn



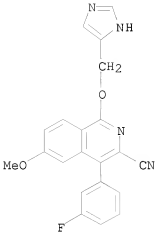
RN 849546-78-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-6-methoxy- (CA INDEX NAME)



RN 849546-80-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1-(1H-imidazol-5-ylmethoxy)-6-methoxy- (CA INDEX NAME)

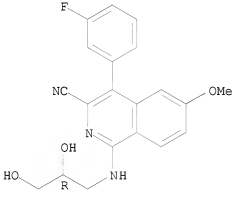
Updated Search

stn



RN 849546-83-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2R)-2,3-dihydroxypropyl]amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.

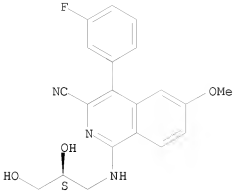


RN 849546-86-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2S)-2,3-dihydroxypropyl]amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

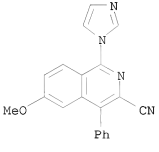
Absolute stereochemistry.

Updated Search

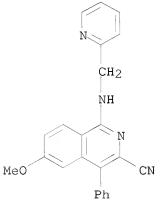
stn



RN 849546-89-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(1H-imidazol-1-yl)-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849546-92-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-[(2-pyridinylmethyl)amino]- (CA INDEX NAME)

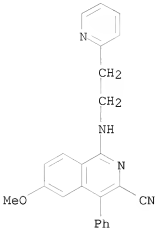


RN 849546-95-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-[[2-(2-

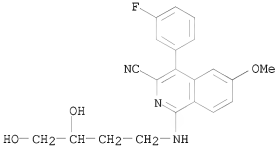
Updated Search

stn

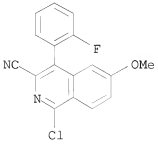
pyridinyl)ethyl]amino]- (CA INDEX NAME)



RN 849546-98-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3,4-dihydroxybutyl)amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



RN 849547-01-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-chloro-4-(2-fluorophenyl)-6-methoxy- (CA INDEX NAME)

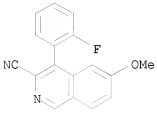


RN 849547-03-1 HCAPLUS

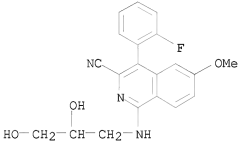
Updated Search

stn

CN 3-Isoquinolinecarbonitrile, 4-(2-fluorophenyl)-6-methoxy- (CA INDEX NAME)

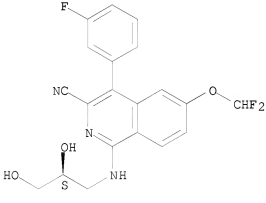


RN 849547-05-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2,3-dihydroxypropyl)amino]-4-(2-fluorophenyl)-6-methoxy- (CA INDEX NAME)



RN 849547-07-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-1-[[(2S)-2,3-dihydroxypropyl]amino]-4-(3-fluorophenyl)- (CA INDEX NAME)

Absolute stereochemistry.

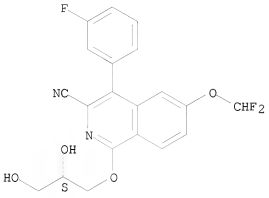


RN 849547-09-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-1-[(2S)-2,3-dihydroxypropoxy]-4-(3-fluorophenyl)- (CA INDEX NAME)

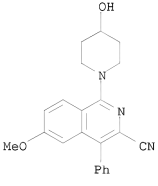
Updated Search

stn

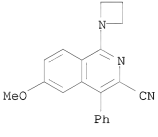
Absolute stereochemistry.



RN 849547-10-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(4-hydroxy-1-piperidinyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849547-13-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(1-azetidinyl)-6-methoxy-4-phenyl- (CA INDEX NAME)

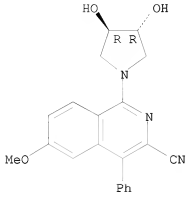


RN 849547-15-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3R,4R)-3,4-dihydroxy-1-pyrrolidinyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

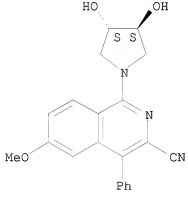
stn

Absolute stereochemistry.

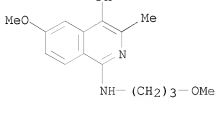


RN 849547-17-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3S,4S)-3,4-dihydroxy-1-pyrrolidinyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



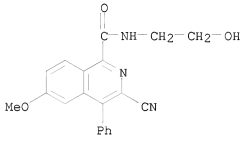
RN 849547-19-9 HCAPLUS
CN 1-Isoquinolinamine, 6-methoxy-N-(3-methoxypropyl)-3-methyl-4-phenyl- (CA INDEX NAME)



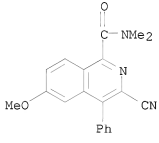
Updated Search

stn

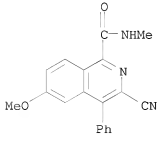
RN 849547-28-0 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(2-hydroxyethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849547-31-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N,N-dimethyl-4-phenyl- (CA INDEX NAME)



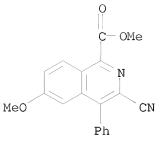
RN 849547-33-7 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-methyl-4-phenyl- (CA INDEX NAME)



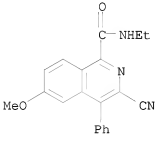
RN 849547-35-9 HCAPLUS
CN 1-Isoquinolinecarboxylic acid, 3-cyano-6-methoxy-4-phenyl-, methyl ester (CA INDEX NAME)

Updated Search

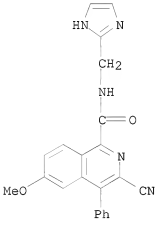
stn



RN 849547-37-1 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-ethyl-6-methoxy-4-phenyl- (CA INDEX NAME)



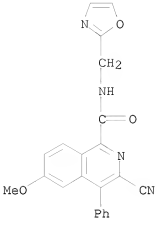
RN 849547-39-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(1H-imidazol-2-ylmethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



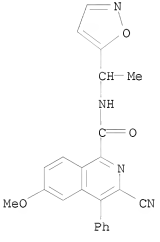
RN 849547-41-7 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-(2-oxazolylmethyl)-4-phenyl- (CA INDEX NAME)

Updated Search

stn



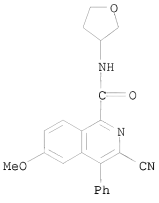
RN 849547-43-9 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[1-(5-isoxazolyl)ethyl]-6-methoxy-4-phenyl- (CA INDEX NAME)



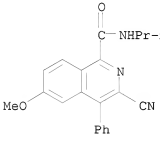
RN 849547-45-1 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-(tetrahydro-3-furanyl)- (CA INDEX NAME)

Updated Search

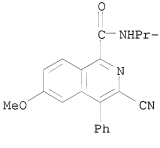
stn



RN 849547-47-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-propyl- (CA INDEX NAME)



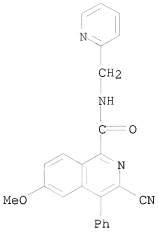
RN 849547-49-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-(1-methylethyl)-4-phenyl- (CA INDEX NAME)



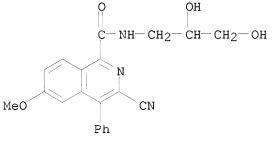
RN 849547-50-8 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-(2-pyridinylmethyl)- (CA INDEX NAME)

Updated Search

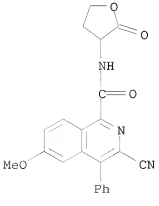
stn



RN 849547-51-9 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(2,3-dihydroxypropyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



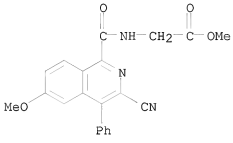
RN 849547-52-0 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-(tetrahydro-2-oxo-3-furanyl)- (CA INDEX NAME)



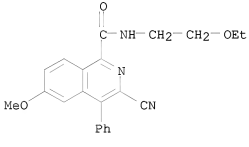
Updated Search

stn

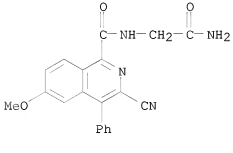
RN 849547-53-1 HCAPLUS
CN Glycine, N-[(3-cyano-6-methoxy-4-phenyl-1-isoquinolinyl)carbonyl]-, methyl ester (CA INDEX NAME)



RN 849547-54-2 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(2-ethoxyethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



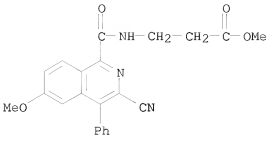
RN 849547-55-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, N-(2-amino-2-oxoethyl)-3-cyano-6-methoxy-4-phenyl- (CA INDEX NAME)



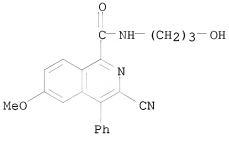
RN 849547-57-5 HCAPLUS
CN β-Alanine, N-[(3-cyano-6-methoxy-4-phenyl-1-isoquinolinyl)carbonyl]-, methyl ester (CA INDEX NAME)

Updated Search

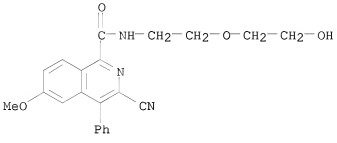
stn



RN 849547-59-7 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(3-hydroxypropyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



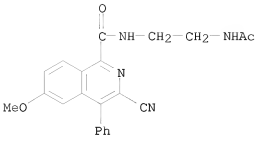
RN 849547-61-1 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[2-(2-hydroxyethoxy)ethyl]-6-methoxy-4-phenyl- (CA INDEX NAME)



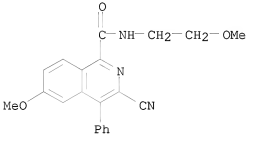
RN 849547-63-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, N-[2-(acetylamino)ethyl]-3-cyano-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

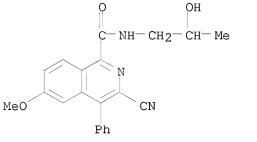
stn



RN 849547-65-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-(2-methoxyethyl)-4-phenyl-
(CA INDEX NAME)



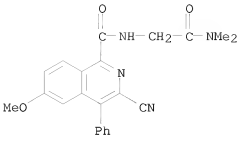
RN 849547-67-7 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(2-hydroxypropyl)-6-methoxy-4-phenyl-
(CA INDEX NAME)



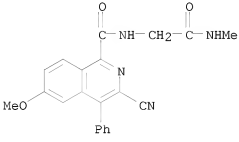
RN 849547-68-8 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[2-(dimethylamino)-2-oxoethyl]-6-
methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

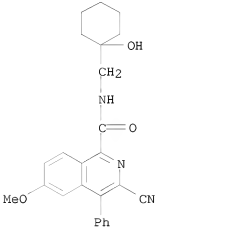
stn



RN 849547-69-9 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-[2-(methylamino)-2-oxoethyl]-4-phenyl- (CA INDEX NAME)

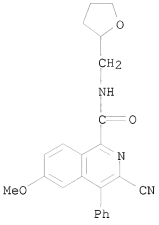


RN 849547-71-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[(1-hydroxycyclohexyl)methyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

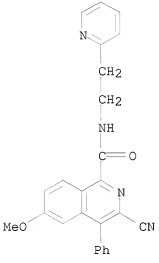


RN 849547-73-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-[(tetrahydro-2-furanyl)methyl]- (CA INDEX NAME)

Updated Search

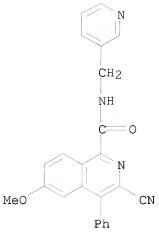


RN 849547-75-7 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-[2-(2-pyridinyl)ethyl]- (CA INDEX NAME)

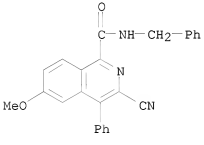


RN 849547-76-8 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-(3-pyridinylmethyl)- (CA INDEX NAME)

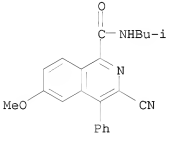
stn



RN 849547-78-0 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-(phenylmethyl)-
(CA INDEX NAME)



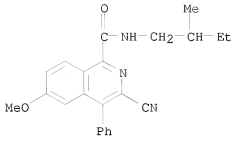
RN 849547-80-4 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-(2-methylpropyl)-4-phenyl-
(CA INDEX NAME)



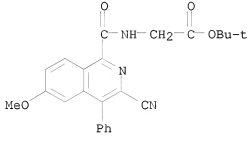
RN 849547-81-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-(2-methylbutyl)-4-phenyl-
(CA INDEX NAME)

Updated Search

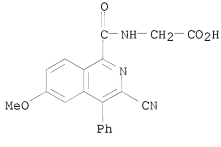
stn



RN 849547-83-7 HCAPLUS
CN Glycine, N-[(3-cyano-6-methoxy-4-phenyl-1-isoquinolinyl)carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



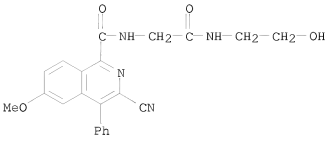
RN 849547-85-9 HCAPLUS
CN Glycine, N-[(3-cyano-6-methoxy-4-phenyl-1-isoquinolinyl)carbonyl]- (CA INDEX NAME)



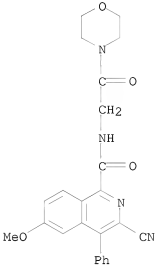
RN 849547-87-1 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[2-[(2-hydroxyethyl)amino]-2-oxoethyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

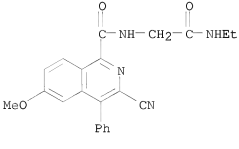
stn



RN 849547-88-2 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-[2-(4-morpholinyl)-2-oxoethyl]-4-phenyl- (CA INDEX NAME)



RN 849547-90-6 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[2-(ethylamino)-2-oxoethyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

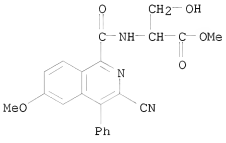


RN 849547-91-7 HCAPLUS

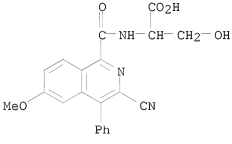
Updated Search

stn

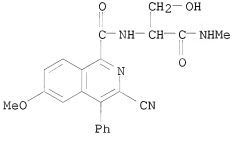
CN Serine, N-[(3-cyano-6-methoxy-4-phenyl-1-isoquinolinyl)carbonyl]-, methyl ester (CA INDEX NAME)



RN 849547-92-8 HCAPLUS
CN Serine, N-[(3-cyano-6-methoxy-4-phenyl-1-isoquinolinyl)carbonyl]- (CA INDEX NAME)



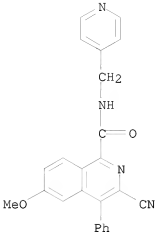
RN 849547-93-9 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[1-(hydroxymethyl)-2-(methylamino)-2-oxoethyl]-6-methoxy-4-phenyl- (CA INDEX NAME)



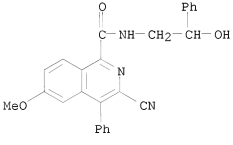
RN 849547-95-1 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Updated Search

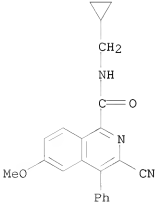
stn



RN 849547-96-2 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(2-hydroxy-2-phenylethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849547-97-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(cyclopropylmethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)

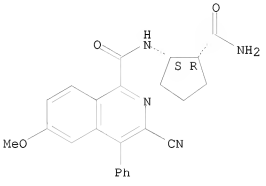


Updated Search

stn

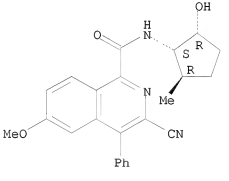
RN 849547-99-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, N-[(1S,2R)-2-(aminocarbonyl)cyclopentyl]-3-cyano-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 849548-00-1 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[(1S,2R,5R)-2-hydroxy-5-methylcyclopentyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

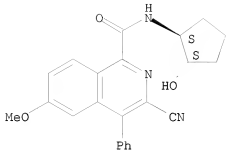


RN 849548-01-2 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[(1S,2S)-2-hydroxycyclopentyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

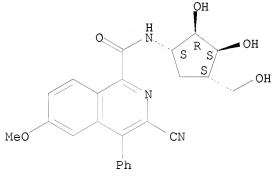
Updated Search

stn



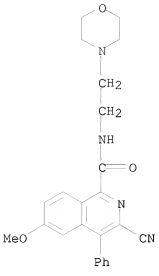
RN 849548-02-3 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-[(1S,2R,3S,4S)-2,3-dihydroxy-4-(hydroxymethyl)cyclopentyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.



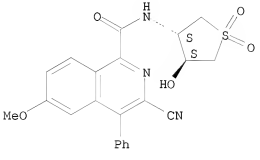
RN 849548-03-4 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-N-[2-(4-morpholinyl)ethyl]-4-phenyl- (CA INDEX NAME)

stn

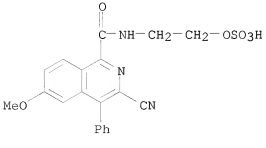


RN 849548-04-5 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-[(3S,4S)-tetrahydro-4-hydroxy-1,1-dioxido-3-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 849548-05-6 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-[2-(sulfooxy)ethyl]- (CA INDEX NAME)

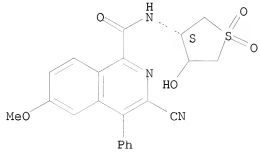


Updated Search

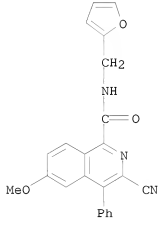
stn

RN 849548-06-7 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-6-methoxy-4-phenyl-N-[(3S)-tetrahydro-4-hydroxy-1,1-dioxido-3-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.



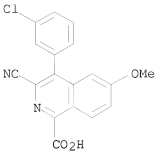
RN 849548-07-8 HCAPLUS
CN 1-Isoquinolinecarboxamide, 3-cyano-N-(2-furanylmethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



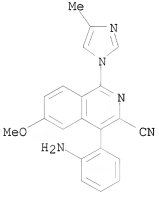
RN 849548-08-9 HCAPLUS
CN 1-Isoquinolinecarboxylic acid, 4-(3-chlorophenyl)-3-cyano-6-methoxy- (CA INDEX NAME)

Updated Search

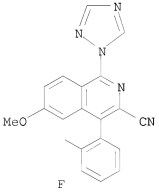
stn



RN 849548-34-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(2-aminophenyl)-6-methoxy-1-(4-methyl-1H-imidazol-1-yl)- (CA INDEX NAME)



RN 849548-46-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-(1H-1,2,4-triazol-1-yl)- (CA INDEX NAME)

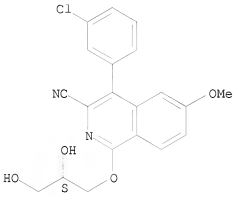


RN 849548-47-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-[(2S)-2,3-

Updated Search

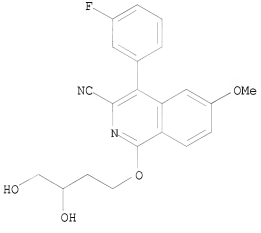
dihydroxypropoxy]-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.



RN 849548-48-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(3,4-dihydroxybutoxy)-4-(3-fluorophenyl)-6-methoxy-, (+)- (CA INDEX NAME)

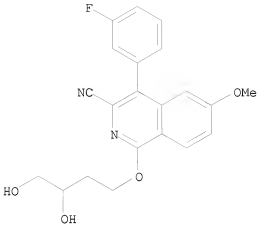
Rotation (+).



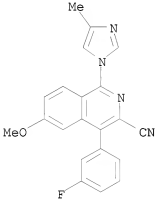
RN 849548-49-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(3,4-dihydroxybutoxy)-4-(3-fluorophenyl)-6-methoxy-, (-)- (CA INDEX NAME)

Rotation (-).

stn



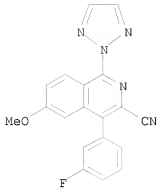
RN 849548-50-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-(4-methyl-1H-imidazol-1-yl)- (CA INDEX NAME)



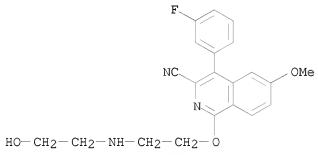
RN 849548-51-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-(2H-1,2,3-triazol-2-yl)- (CA INDEX NAME)

Updated Search

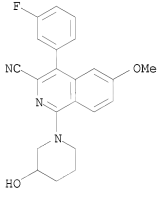
stn



RN 849548-52-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1-[2-[(2-hydroxyethyl)amino]ethoxy]-6-methoxy- (CA INDEX NAME)



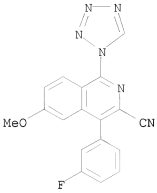
RN 849548-53-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1-(3-hydroxy-1-piperidinyl)-6-methoxy- (CA INDEX NAME)



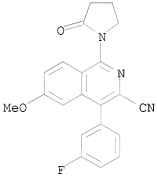
RN 849548-54-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-(1H-tetrazol-1-yl)- (CA INDEX NAME)

Updated Search

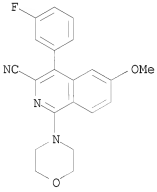
stn



RN 849548-55-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-(2-oxo-1-pyrrolidinyl)- (CA INDEX NAME)



RN 849548-56-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-6-methoxy-1-(4-morpholinyl)- (CA INDEX NAME)

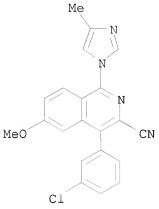


RN 849548-57-8 HCAPLUS

Updated Search

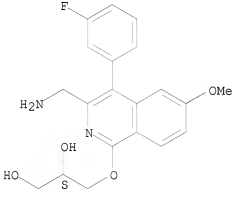
stn

CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-(4-methyl-1H-imidazol-1-yl)- (CA INDEX NAME)



RN 849548-58-9 HCAPLUS
CN 1,2-Propanediol, 3-[[3-(aminomethyl)-4-(3-fluorophenyl)-6-methoxy-1-isoquinolinyl]oxy]-, (2S)- (CA INDEX NAME)

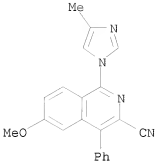
Absolute stereochemistry.



RN 849548-59-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-1-(4-methyl-1H-imidazol-1-yl)-4-phenyl- (CA INDEX NAME)

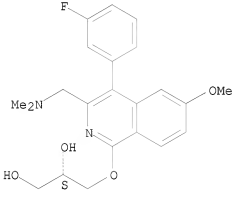
Updated Search

stn



RN 849548-60-3 HCAPLUS
CN 1,2-Propanediol, 3-[[3-[(dimethylamino)methyl]-4-(3-fluorophenyl)-6-methoxy-1-isoquinolinyl]oxy]-, (2S)- (CA INDEX NAME)

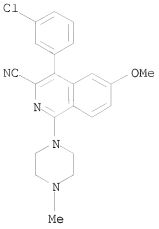
Absolute stereochemistry.



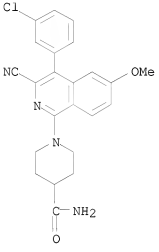
RN 849548-61-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

Updated Search

stn



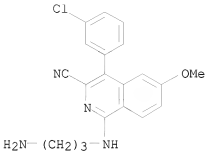
RN 849548-64-7 HCAPLUS
CN 4-Piperidinecarboxamide, 1-[4-(3-chlorophenyl)-3-cyano-6-methoxy-1-isoquinolinyl]- (CA INDEX NAME)



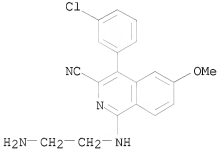
RN 849548-65-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3-aminopropyl)amino]-4-(3-chlorophenyl)-6-methoxy- (CA INDEX NAME)

Updated Search

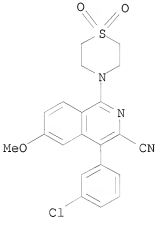
stn



RN 849548-66-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2-aminoethyl)amino]-4-(3-chlorophenyl)-6-methoxy- (CA INDEX NAME)



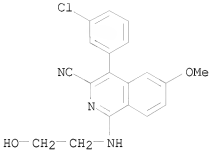
RN 849548-67-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-(1,1-dioxido-4-thiomorpholinyl)-6-methoxy- (CA INDEX NAME)



RN 849548-68-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-[(2-hydroxyethyl)amino]-6-methoxy- (CA INDEX NAME)

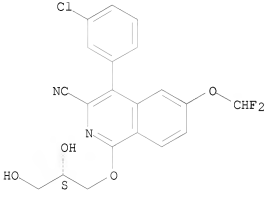
Updated Search

stn



RN 849548-69-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-(difluoromethoxy)-1-[(2S)-2,3-dihydroxypropoxy]- (CA INDEX NAME)

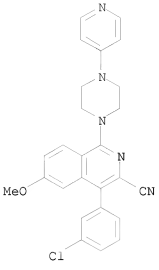
Absolute stereochemistry.



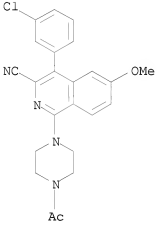
RN 849548-70-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-[4-(4-pyridinyl)-1-piperazinyl]- (CA INDEX NAME)

Updated Search

stn



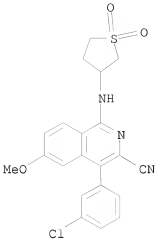
RN 849548-71-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(4-acetyl-1-piperazinyl)-4-(3-chlorophenyl)-6-methoxy- (CA INDEX NAME)



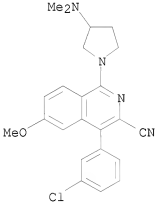
RN 849548-72-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-[(tetrahydro-1,1-dioxido-3-thienyl)amino]- (CA INDEX NAME)

Updated Search

stn



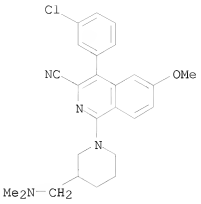
RN 849548-73-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-[3-(dimethylamino)-1-pyrrolidinyl]-6-methoxy- (CA INDEX NAME)



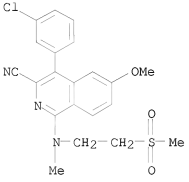
RN 849548-74-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-[3-[(dimethylamino)methyl]-1-piperidinyl]-6-methoxy- (CA INDEX NAME)

Updated Search

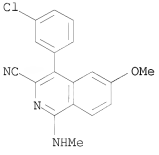
stn



RN 849548-75-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-[methyl[2-(methylsulfonyl)ethyl]amino]- (CA INDEX NAME)

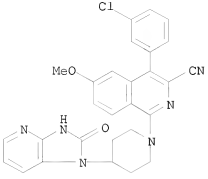


RN 849548-76-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-(methylamino)- (CA INDEX NAME)



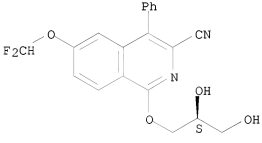
RN 849548-77-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-[4-(2,3-dihydro-2-oxo-1H-imidazo[4,5-b]pyridin-1-yl)-1-piperidinyl]-6-methoxy- (CA INDEX NAME)

Updated Search



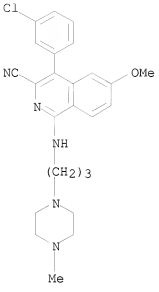
RN 849548-78-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-1-[(2S)-2,3-dihydroxypropoxy]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

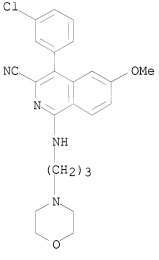


RN 849548-79-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-[[3-(4-methyl-1-piperazinyl)propyl]amino]- (CA INDEX NAME)

stn



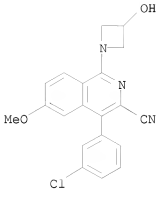
RN 849548-80-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-[[3-(4-morpholinyl)propyl]amino]- (CA INDEX NAME)



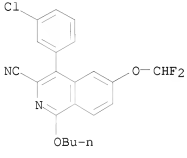
RN 849548-81-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1-(3-hydroxy-1-azetidinyl)-6-methoxy- (CA INDEX NAME)

Updated Search

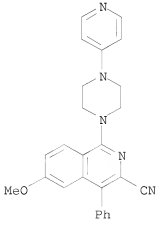
stn



RN 849548-82-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-butoxy-4-(3-chlorophenyl)-6-(difluoromethoxy)- (CA INDEX NAME)



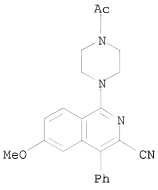
RN 849548-83-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-[4-(4-pyridinyl)-1-piperazinyl]- (CA INDEX NAME)



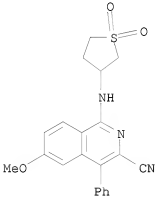
Updated Search

stn

RN 849548-84-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(4-acetyl-1-piperazinyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



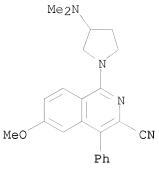
RN 849548-85-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-methoxy-4-phenyl-1-[(tetrahydro-1,1-dioxido-3-thienyl)amino]- (CA INDEX NAME)



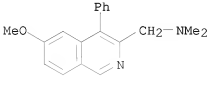
RN 849548-86-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[3-(dimethylamino)-1-pyrrolidinyl]-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

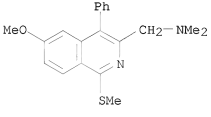
stn



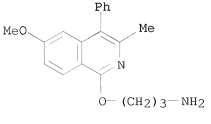
RN 849549-04-8 HCAPLUS
CN 3-Isoquinolinemethanamine, 6-methoxy-N,N-dimethyl-4-phenyl- (CA INDEX NAME)



RN 849549-05-9 HCAPLUS
CN 3-Isoquinolinemethanamine, 6-methoxy-N,N-dimethyl-1-(methylthio)-4-phenyl- (CA INDEX NAME)



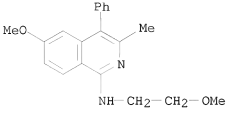
RN 849549-06-0 HCAPLUS
CN 1-Propanamine, 3-[(6-methoxy-3-methyl-4-phenyl-1-isoquinolinyl)oxy]- (CA INDEX NAME)



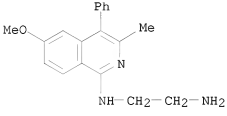
Updated Search

stn

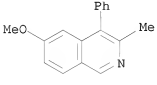
RN 849549-07-1 HCAPLUS
CN 1-Isoquinolinamine, 6-methoxy-N-(2-methoxyethyl)-3-methyl-4-phenyl- (CA INDEX NAME)



RN 849549-08-2 HCAPLUS
CN 1,2-Ethanediamine, N1-(6-methoxy-3-methyl-4-phenyl-1-isoquinolinyl)- (CA INDEX NAME)



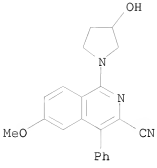
RN 849549-09-3 HCAPLUS
CN Isoquinoline, 6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



RN 849549-10-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(3-hydroxy-1-pyrrolidinyl)-6-methoxy-4-phenyl- (CA INDEX NAME)

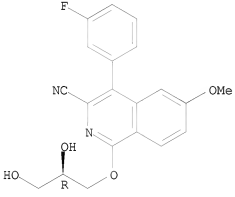
Updated Search

stn



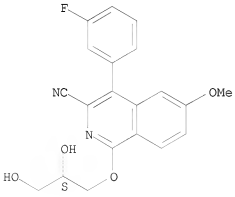
RN 849549-11-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2R)-2,3-dihydroxypropoxy]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.



RN 849549-12-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2S)-2,3-dihydroxypropoxy]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.

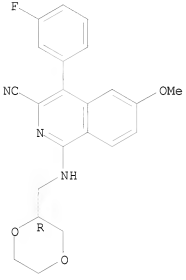


Updated Search

stn

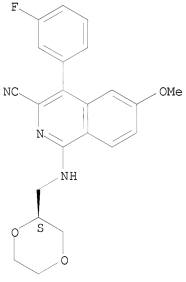
RN 849549-13-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2R)-1,4-dioxan-2-ylmethyl]amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.



RN 849549-14-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2S)-1,4-dioxan-2-ylmethyl]amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

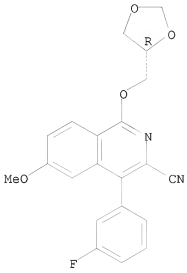
Absolute stereochemistry.



RN 849549-15-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(4R)-1,3-dioxolan-4-ylmethoxy]-4-(3-

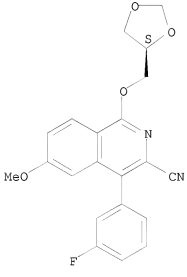
fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.



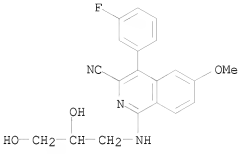
RN 849549-16-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(4S)-1,3-dioxolan-4-ylmethoxy]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.



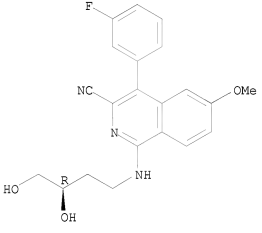
RN 849549-17-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(2,3-dihydroxypropyl)amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

stn



RN 849549-18-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(3R)-3,4-dihydroxybutyl]amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

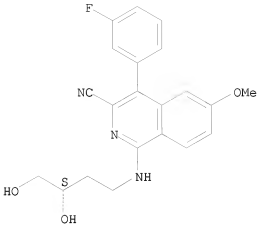
Absolute stereochemistry.



RN 849549-19-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(3S)-3,4-dihydroxybutyl]amino]-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)

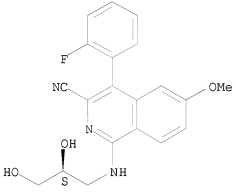
Absolute stereochemistry.

stn



RN 849549-20-8 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2S)-2,3-dihydroxypropyl]amino]-4-(2-fluorophenyl)-6-methoxy- (CA INDEX NAME)

Absolute stereochemistry.

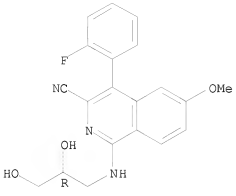


RN 849549-21-9 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[[(2R)-2,3-dihydroxypropyl]amino]-4-(2-fluorophenyl)-6-methoxy- (CA INDEX NAME)

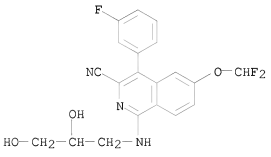
Absolute stereochemistry.

Updated Search

stn

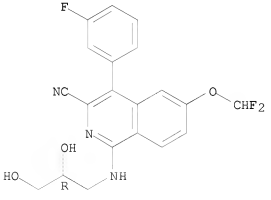


RN 849549-22-0 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-1-[(2,3-dihydroxypropyl)amino]-4-(3-fluorophenyl)- (CA INDEX NAME)



RN 849549-23-1 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-1-[[(2R)-2,3-dihydroxypropyl]amino]-4-(3-fluorophenyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 849549-24-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-1-(2,3-dihydroxypropoxy)-4-

Updated Search

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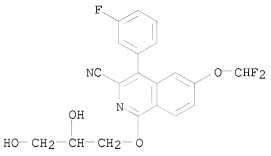
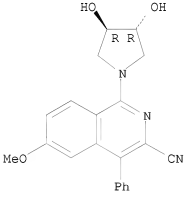
(3-fluorophenyl)- (CA INDEX NAME)

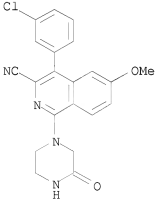


RN 849549-25-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-[(3R,4R)-3,4-dihydroxy-1-pyrrolidinyl]-6-methoxy-4-phenyl-, rel- (CA INDEX NAME)

Relative stereochemistry.



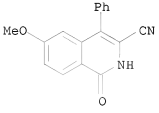
RN 849549-32-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-6-methoxy-1-(3-oxo-1-piperazinyl)- (CA INDEX NAME)



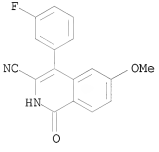
Updated Search

stn

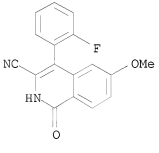
IT 849549-26-4 849549-27-5 849549-29-7
849635-33-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of isoquinoline derivs. as potassium channel inhibitors)
RN 849549-26-4 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1,2-dihydro-6-methoxy-1-oxo-4-phenyl- (CA INDEX NAME)



RN 849549-27-5 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-fluorophenyl)-1,2-dihydro-6-methoxy-1-oxo- (CA INDEX NAME)



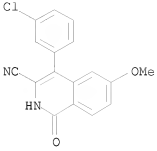
RN 849549-29-7 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(2-fluorophenyl)-1,2-dihydro-6-methoxy-1-oxo- (CA INDEX NAME)



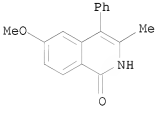
RN 849635-33-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 4-(3-chlorophenyl)-1,2-dihydro-6-methoxy-1-oxo- (CA INDEX NAME)

Updated Search

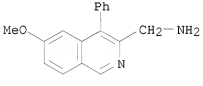
stn



IT 849424-95-9P 849548-87-4P 849548-88-5P
849548-89-6P 849548-90-9P 849548-91-0P
849548-93-2P 849548-94-3P 849548-97-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of isoquinoline derivs. as potassium channel inhibitors)
RN 849424-95-9 HCAPLUS
CN 1(2H)-Isoquinolinone, 6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



RN 849548-87-4 HCAPLUS
CN 3-Isoquinolinemethanamine, 6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849548-88-5 HCAPLUS
CN 1(2H)-Isoquinolinone, 3-(aminomethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

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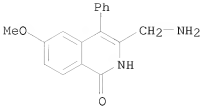
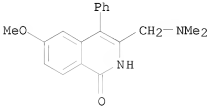
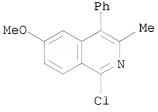


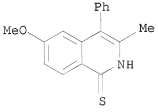
RN 849548-89-6 HCAPLUS
CN 1(2H)-Isoquinolinone, 3-[(dimethylamino)methyl]-6-methoxy-4-phenyl- (CA INDEX NAME)



RN 849548-90-9 HCAPLUS
CN Isoquinoline, 1-chloro-6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



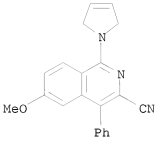
RN 849548-91-0 HCAPLUS
CN 1(2H)-Isoquinolinethione, 6-methoxy-3-methyl-4-phenyl- (CA INDEX NAME)



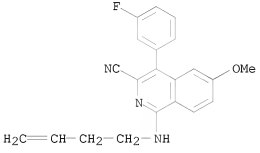
RN 849548-93-2 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(2,5-dihydro-1H-pyrrol-1-yl)-6-methoxy-4-phenyl- (CA INDEX NAME)

Updated Search

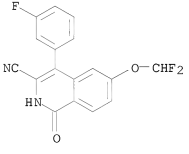
stn



RN 849548-94-3 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 1-(3-buten-1-ylamino)-4-(3-fluorophenyl)-6-methoxy- (CA INDEX NAME)



RN 849548-97-6 HCAPLUS
CN 3-Isoquinolinecarbonitrile, 6-(difluoromethoxy)-4-(3-fluorophenyl)-1,2-dihydro-1-oxo- (CA INDEX NAME)



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(FILE 'HOME' ENTERED AT 06:01:08 ON 08 DEC 2008)

FILE 'REGISTRY' ENTERED AT 06:01:29 ON 08 DEC 2008
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Updated Search

stn

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L3           277 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 06:04:08 ON 08 DEC 2008
L4            29 S L3
L5             4 S L4 AND TROTTER, B?/AU

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L6           25 L4 NOT L5

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           295 NANDA, K?/AU
L7           0 L6 AND NANDA, K?/AU

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L9           0 L6 AND DINSMORE, C?/AU

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           154 CLAREMON, D?/AU
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L6   ANSWER 1 OF 25  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2008:994686  HCAPLUS
DOCUMENT NUMBER:          149:307083
TITLE:                    Chlorotris(triphenylphosphine)-rhodium(I)
AUTHOR(S):                Burgess, Kevin; van der Donk, Wilfred A.
CORPORATE SOURCE:         USA
SOURCE:                   e-EROS Encyclopedia of Reagents for Organic Synthesis
                          (2001), No pp. given.  John Wiley & Sons, Ltd.:
                          Chichester, UK.
                          CODEN: 69KUHI
                          URL: http://www3.interscience.wiley.com/cgi-
                          bin/mrwhome/104554785/HOME
DOCUMENT TYPE:            Conference; General Review; (online computer file)
LANGUAGE:                 English
OTHER SOURCE(S):          CASREACT 149:307083
AB   A review of the article Chlorotris(triphenylphosphine)-rhodium(I).
IT   585531-20-0P 585531-23-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (Chlorotris(triphenylphosphine)-rhodium(I))
RN   585531-20-0  HCAPLUS
CN   Isoquinoline, 6-methoxy-1-methyl-3,4-diphenyl-  (CA INDEX NAME)
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Updated Search

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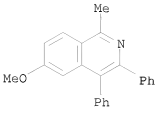
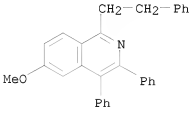


RN 585531-23-3 HCAPLUS
CN Isoquinoline, 6-methoxy-3,4-diphenyl-1-(2-phenylethyl)- (CA INDEX NAME)



L6 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1043244 HCAPLUS
DOCUMENT NUMBER: 145:454923
TITLE: A convenient synthesis of 1,4-disubstituted isoquinolines by reactions of α-substituted 2-lithio-β-methoxystyrenes with nitriles
AUTHOR(S): Kobayashi, Kazuhiro; Hayashi, Kazutaka; Miyamoto, Kazuna; Morikawa, Osamu; Konishi, Hisatoshi
CORPORATE SOURCE: Department of Materials Science, Faculty of Engineering, Tottori University, 4-101 Koyama-minami, Tottori, 680-8552, Japan
SOURCE: Synthesis (2006), (17), 2934-2938
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:454923
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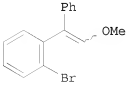

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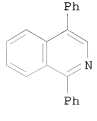

II

Updated Search

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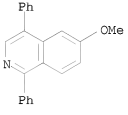
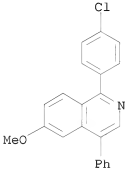
AB It has been found that halogen-lithium exchange between α-substituted 2-bromo-β-methoxystyrene derivs., e.g., I, and n-butyllithium generates α-substituted 2-lithio-β-methoxystyrene derivs., which successfully react with a range of nitriles to afford the corresponding 1,4-disubstituted isoquinolines, e.g., II, in reasonable yields.

IT 82894-69-7P 913192-02-6P 913192-03-7P
913192-04-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of disubstituted isoquinolines by halogen lithium exchange of bromomethoxystyrenes with n-butyllithium and subsequent condensation with aryl/alkyl nitriles)

RN 82894-69-7 HCAPLUS
CN Isoquinoline, 6-methoxy-1,4-diphenyl- (CA INDEX NAME)



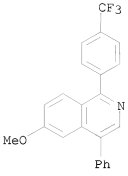
RN 913192-02-6 HCAPLUS
CN Isoquinoline, 1-(4-chlorophenyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



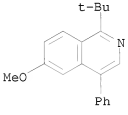
RN 913192-03-7 HCAPLUS
CN Isoquinoline, 6-methoxy-4-phenyl-1-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

Updated Search

stn



RN 913192-04-8 HCAPLUS
CN Isoquinoline, 1-(1,1-dimethylethyl)-6-methoxy-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:764380 HCAPLUS
DOCUMENT NUMBER: 145:377169
TITLE: New synthesis of isoquinoline and 3,4-dihydroisoquinoline derivatives
AUTHOR(S): Kobayashi, Kazuhiro; Shiokawa, Taiyo; Omote, Hiroki; Hashimoto, Kenichi; Morikawa, Osamu; Konishi, Hisatoshi
CORPORATE SOURCE: Department of Materials Science, Faculty of Engineering, Tottori University, 4-101 Koyama-minami, Tottori, 680-8552, Japan
SOURCE: Bulletin of the Chemical Society of Japan (2006), 79(7), 1126-1132
CODEN: BCSJA8; ISSN: 0009-2673
PUBLISHER: Chemical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:377169
GI

Updated Search

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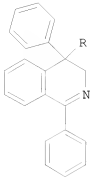


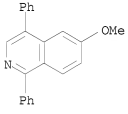
I

AB A simple and efficient synthesis of isoquinoline and 3,4-dihydroisoquinoline derivs. was described. 1-Alkyl(or aryl)isoquinoline and 1-isoquinolinamine derivs. were obtained by intramol. cyclization of 2-(2-methoxyethenyl)benzonitriles initiated by the addition of alkyl(or aryl)lithiums and lithium dialkylamides to the nitrile carbons, resp. Synthesis of 4-aryl-3,4-dihydroisoquinolines was achieved by reactions of 2-(1-arylethenyl)benzonitriles with organolithiums, followed by aqueous workup. Treatment of the reaction mixts. with electrophiles prior to aqueous workup allowed the synthesis of 4,4-disubstituted 3,4-dihydroisoquinolines, e.g., I (Me, Et, Bn or t-BuOCOCH2).

IT 82894-69-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of alkyl- or (aryl)isoquinoline derivs. via intramol. heterocyclization of (methoxyethenyl)benzonitriles initiated by addition of alkyl- or (aryl)lithiums to nitrile carbons)

RN 82894-69-7 HCAPLUS

CN Isoquinoline, 6-methoxy-1,4-diphenyl- (CA INDEX NAME)

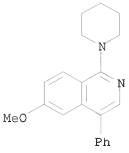


IT 686719-45-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isoquinolinamine derivs. via intramol. heterocyclization of (methoxyethenyl)benzonitriles initiated by the addition of lithium dialkylamides to nitrile carbons)

RN 686719-45-9 HCAPLUS

CN Isoquinoline, 6-methoxy-4-phenyl-1-(1-piperidinyl)- (CA INDEX NAME)

Updated Search



REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1007173 HCAPLUS
DOCUMENT NUMBER: 143:440242
TITLE: Novel Methods for the Synthesis of 4-Arylisoquinolinium Perchlorates and 4-Arylisoquinolin-1-ones
AUTHOR(S): Coskun, Necdet; Kizilkusak, Yunus
CORPORATE SOURCE: Department of Chemistry, Uludag University, Goeruekle Bursa, Turk.
SOURCE: Synthetic Communications (2005), 35(18), 2435-2443
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:440242

AB 2-Benzylamino-1-phenylethanones were converted to the corresponding isoquinolinium perchlorates (I) in high yields using 70% HClO4-FeCl3 mixture as a cyclization and oxidation reagent. A mild and high yielding method for the subsequent oxidation of I to isoquinolin-1-ones involving the treatment of I with KOH and K3[Fe(CN)6] in THF-H2O two-phase system at room temperature was developed. Compds. I disproportionate to isoquinolin-1-ones and the corresponding 1,2-dihydroisoquinoline in the presence of base, which in turn is oxidized by K3[Fe(CN)6] to I.

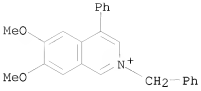
IT 206126-10-5P 868601-73-4P 868601-75-6P
868601-78-9P 868601-80-3P 868601-84-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of arylisoquinolinium perchlorates and arylisoquinolinones from (benzylamino)phenylethanones by cyclization and oxidation)

RN 206126-10-5 HCAPLUS
CN Isoquinolinium, 6,7-dimethoxy-4-phenyl-2-(phenylmethyl)-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 206126-09-2
CMF C24 H22 N O2

stn



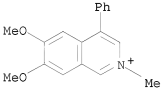
CM 2

CRN 14797-73-0
CMF Cl O4

RN 868601-73-4 HCAPLUS
CN Isoquinolinium, 6,7-dimethoxy-2-methyl-4-phenyl-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 868601-72-3
CMF C18 H18 N O2



CM 2

CRN 14797-73-0
CMF Cl O4

RN 868601-75-6 HCAPLUS
CN Isoquinolinium, 2-ethyl-6,7-dimethoxy-4-phenyl-, perchlorate (1:1) (CA

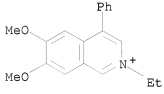
Updated Search

stn

INDEX NAME)

CM 1

CRN 868601-74-5
CMF C19 H20 N O2



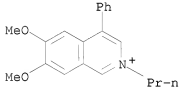
CM 2

CRN 14797-73-0
CMF Cl O4

RN 868601-78-9 HCAPLUS
CN Isoquinolinium, 6,7-dimethoxy-4-phenyl-2-propyl-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 868601-77-8
CMF C20 H22 N O2



CM 2

CRN 14797-73-0
CMF Cl O4

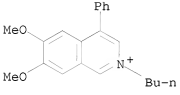
Updated Search

stn

RN 868601-80-3 HCAPLUS
CN Isoquinolinium, 2-butyl-6,7-dimethoxy-4-phenyl-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 868601-79-0
CMF C21 H24 N O2



CM 2

CRN 14797-73-0
CMF Cl O4

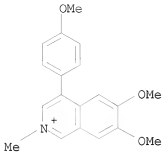
RN 868601-84-7 HCAPLUS
CN Isoquinolinium, 6,7-dimethoxy-4-(4-methoxyphenyl)-2-methyl-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 868601-83-6
CMF C19 H20 N O3

Updated Search

stn



CM 2

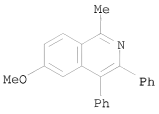
CRN 14797-73-0
CMF Cl O4

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

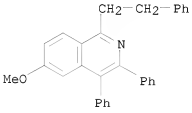
L6 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:408217 HCAPLUS
Correction of: 2005:155220
DOCUMENT NUMBER: 143:266757
Correction of: 142:197771
TITLE: Product class 5: isoquinolines
AUTHOR(S): Alvarez, M.; Joule, J. A.
CORPORATE SOURCE: Germany
SOURCE: Science of Synthesis (2005), 15, 661-838
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review primarily covering methods of preparation of isoquinolines via cyclization, ring transformations or substituent modification. Isoquinoline 2-oxides and isoquinolinium salts are also included.
IT 585531-20-0P 585531-23-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isoquinolines and analogs via cyclization, ring transformations or substituent modifications)
RN 585531-20-0 HCAPLUS
CN Isoquinoline, 6-methoxy-1-methyl-3,4-diphenyl- (CA INDEX NAME)

Updated Search

stn



RN 585531-23-3 HCAPLUS
CN Isoquinoline, 6-methoxy-3,4-diphenyl-1-(2-phenylethyl)- (CA INDEX NAME)

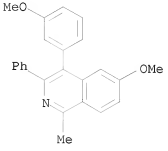


L6 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:248544 HCAPLUS
DOCUMENT NUMBER: 142:482016
TITLE: Direct, Two-Step Synthetic Pathway to Novel Dibenzo[a,c]phenanthridines
AUTHOR(S): Churruca, Fatima; SanMartin, Raul; Carril, Monica; Urtiaga, Miren Karmele; Solans, Xavier; Tellitu, Imanol; Dominguez, Esther
CORPORATE SOURCE: Kimika Organikoa II Saila, Zientzi eta Teknologia Fakultatea, Euskal Herriko Unibertsitatea, Bilbao, 48080, Spain
SOURCE: Journal of Organic Chemistry (2005), 70(8), 3178-3187
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:482016
AB Novel dibenzo[a,c]phenanthridines are prepared regioselectively by the application of a straightforward synthetic pathway, starting from new 3,4-diaryl- and 3,4-dihydro-3,4-diarylisoquinolines prepared via Ritter-type heterocyclization and the more classical two-step reductive amination/Bischler-Napieralski cyclization of triarylethanones, resp. A comparative study of nonphenolic oxidative coupling methodologies provides a highly efficient procedure, based on the hypervalent iodine reagent phenyliodine(III) bis(trifluoroacetate) (PIFA), to accomplish the final coupling step.
IT 851962-30-6P 851962-31-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of 3,4-diaryl- and 3,4-dihydro-3,4-diarylisoquinolines via Ritter-type heterocyclization of triarylethanones)
RN 851962-30-6 HCAPLUS

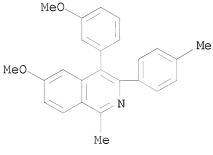
Updated Search

stn

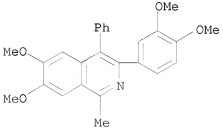
CN Isoquinoline, 6-methoxy-4-(3-methoxyphenyl)-1-methyl-3-phenyl- (CA INDEX NAME)



RN 851962-31-7 HCAPLUS
CN Isoquinoline, 6-methoxy-4-(3-methoxyphenyl)-1-methyl-3-(4-methylphenyl)- (CA INDEX NAME)



IT 851962-23-7P 851962-24-8P 851962-25-9P
851962-26-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(two-step synthetic pathway to dibenzo[a,c]phenanthridines based on ketone heterocyclization and oxidative biaryl coupling)
RN 851962-23-7 HCAPLUS
CN Isoquinoline, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-4-phenyl- (CA INDEX NAME)

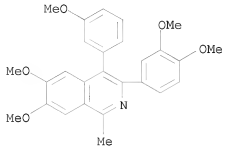


RN 851962-24-8 HCAPLUS

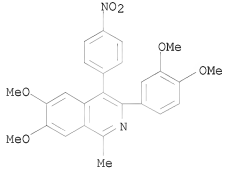
Updated Search

stn

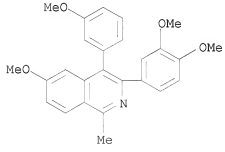
CN Isoquinoline, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-4-(3-methoxyphenyl)-1-methyl- (CA INDEX NAME)



RN 851962-25-9 HCAPLUS
CN Isoquinoline, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-4-(4-nitrophenyl)- (CA INDEX NAME)



RN 851962-26-0 HCAPLUS
CN Isoquinoline, 3-(3,4-dimethoxyphenyl)-6-methoxy-4-(3-methoxyphenyl)-1-methyl- (CA INDEX NAME)

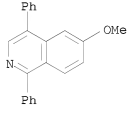


REFERENCE COUNT: 106 THERE ARE 106 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

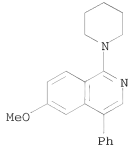
Updated Search

stn

L6 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:231365 HCAPLUS
DOCUMENT NUMBER: 140:391184
TITLE: New synthesis of isoquinoline derivatives by reactions of 2-(2-methoxyethenyl)benzonitriles with organolithiums and lithium dialkylamides
AUTHOR(S): Kobayashi, Kazuhiro; Shiokawa, Taiyo; Morikawa, Osamu; Konishi, Hisatoshi
CORPORATE SOURCE: Department of Materials Science, Faculty of Engineering, Tottori University, Tottori, 680-8552, Japan
SOURCE: Chemistry Letters (2004), 33(3), 236-237
CODEN: CMLTAG; ISSN: 0366-7022
PUBLISHER: Chemical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:391184
AB A simple and efficient synthesis of 1-alkyl(or aryl)isoquinoline and isoquinolin-1-amine derivs. based on intramol. cyclization of 2-(2-methoxyethenyl)benzonitriles initiated by the addition of alkyl(or aryl)lithiums and lithium dialkylamides to the nitrile carbons, resp., is described.
IT 82894-69-7P 686719-45-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isoquinoline derivs. by intramol. cyclization of 2-(2-methoxyethenyl)benzonitriles with organolithiums and lithium dialkylamides)
RN 82894-69-7 HCAPLUS
CN Isoquinoline, 6-methoxy-1,4-diphenyl- (CA INDEX NAME)



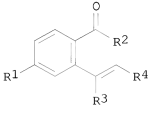
RN 686719-45-9 HCAPLUS
CN Isoquinoline, 6-methoxy-4-phenyl-1-(1-piperidinyl)- (CA INDEX NAME)



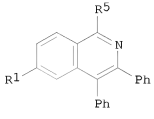
Updated Search

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

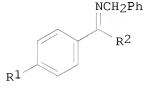
L6 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:505035 HCAPLUS
DOCUMENT NUMBER: 139:197350
TITLE: Rh(I)-Catalyzed Direct ortho-Alkenylation of Aromatic Ketimines with Alkynes and its Application to the Synthesis of Isoquinoline Derivatives
AUTHOR(S): Lim, Sung-Gon; Lee, Jun Hee; Moon, Choong Woon; Hong, Jun-Bae; Jun, Chul-Ho
CORPORATE SOURCE: Department of Chemistry, Yonsei University, Seoul, 120-749, S. Korea
SOURCE: Organic Letters (2003), 5(15), 2759-2761
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:197350
GI



I



II

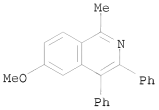


III

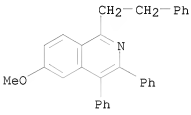
AB Novel synthetic methods for preparation of both ortho-alkenylated aromatic ketones I (R1 = H, F3C, MeO; R2 = Me, Et, n-pentyl; R3 = H, R4 = Bu, Me3C, n-hexyl; R3 = R4 = Ph) and isoquinolines II (R5 = Me, PhCH2CH2) have been developed via the Rh(I)-catalyzed direct ortho-alkenylation of common aromatic ketimines III with alkynes R3C.tplbond.CR4. Furthermore, a highly efficient one-pot synthesis of isoquinolines II was achieved by simply mixing aromatic ketone 4-R1C6H4COMe, benzylamine, and diphenylacetylene in the presence of a Rh(I) catalyst.

IT 585531-20-0P 585531-23-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of alkenylphenyl ketones, alkenylphenyl ketimines and isoquinolines via Rh(I)-catalyzed direct ortho-alkenylation of aromatic ketimines with alkynes)
RN 585531-20-0 HCAPLUS
CN Isoquinoline, 6-methoxy-1-methyl-3,4-diphenyl- (CA INDEX NAME)

stn



RN 585531-23-3 HCAPLUS
CN Isoquinoline, 6-methoxy-3,4-diphenyl-1-(2-phenylethyl)- (CA INDEX NAME)



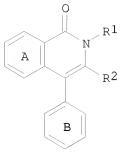
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:902258 HCAPLUS
DOCUMENT NUMBER: 137:379992
TITLE: Method of inhibiting neoplastic cells with isoquinolinonecarboxylates
INVENTOR(S): Pamukcu, Rifat; Piazza, Gary A.
PATENT ASSIGNEE(S): Cell Pathways, Inc., USA
SOURCE: U.S., 119 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6486155	B1	20021126	US 1998-198413	19981124
PRIORITY APPLN. INFO.:			US 1998-198413	19981124

OTHER SOURCE(S): MARPAT 137:379992
GI

Updated Search



I

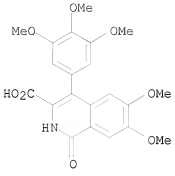
AB A method is claimed for inhibiting neoplasia (no data), particularly cancerous and precancerous lesions, by exposing the affected cells to 1-isoquinoline-3-carboxylates. Such compds. are effective in modulating apoptosis and eliminating and inhibiting the growth of neoplasias such as precancerous lesions, but are not characterized by the severe side reactions of conventional non-steroidal antiinflammatory drugs or other chemotherapeutics. Although the methods of preparation are not claimed, example prepns. of 429 isoquinolines and 107 intermediates are included; these examples are referenced to PCT application WO 98/38168. Although the claims indicate I (ring A and ring B are the same or different and each a (un)substituted benzene ring, R1 is morpholine, R2 is -COOR3, and R3 is alkyl; e.g. 7-benzyloxy-6-methoxy-3-methoxycarbonyl-2-morpholino-4-(3,4,5-trimethoxyphenyl)-1(2H)-isoquinolinone) or pharmaceutically acceptable salt thereof, the examples include a much broader variety of 1-isoquinoline-3-carboxylates.

IT 212489-07-1P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-
212489-10-6P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, monosodium salt 212489-49-1P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-07-7P, 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-
212500-10-2P, 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-, methyl ester
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinolinonecarboxylates for inhibiting neoplastic cells)

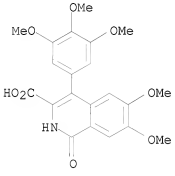
RN 212489-07-1 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

stn

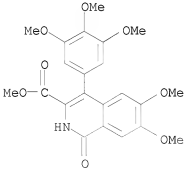


RN 212489-10-6 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, sodium salt (1:1) (CA INDEX NAME)



● Na

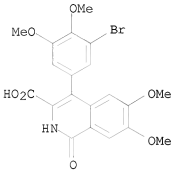
RN 212489-49-1 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)



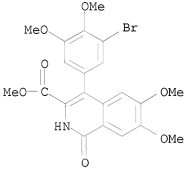
Updated Search

stn

RN 212500-07-7 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo- (CA INDEX NAME)



RN 212500-10-2 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 171 THERE ARE 171 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:795461 HCAPLUS
DOCUMENT NUMBER: 136:69724
TITLE: Synthesis of Isoquinolines and Pyridines by the Palladium-Catalyzed Iminoannulation of Internal Alkynes
AUTHOR(S): Roesch, Kevin R.; Zhang, Haiming; Larock, Richard C.
CORPORATE SOURCE: Department of Chemistry, Iowa State University, Ames, IA, 50011, USA
SOURCE: Journal of Organic Chemistry (2001), 66(24), 8042-8051
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

Updated Search

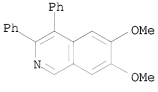
OTHER SOURCE(S): CASREACT 136:69724

AB A wide variety of substituted isoquinoline, tetrahydroisoquinoline, 5,6-dihydrobenz[f]isoquinoline, pyridine, and pyridine heterocycles have been prepared in good to excellent yields via annulation of internal acetylenes with the tert-butylimines of o-iodobenzaldehydes and 3-halo-2-alkenals in the presence of a palladium catalyst. The best results are obtained by employing 5 mol % of Pd(OAc)2, an excess of the alkyne, 1 equiv of Na2CO3 as a base, and 10 mol % of PPh3 in DMF as the solvent. This annulation methodol. is particularly effective for aryl- or alkenyl-substituted alkynes. When electron-rich imines are employed, this chemical can be extended to alkyl-substituted alkynes. Trimethylsilyl-substituted alkynes also undergo this annulation process to afford monosubstituted heterocyclic products absent the silyl group.

IT 385416-24-0P 385416-26-2P 385416-28-4P
385416-39-7P 385416-42-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isoquinolines and pyridines by palladium-catalyzed iminoannulation of internal alkynes)

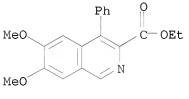
RN 385416-24-0 HCAPLUS

CN Isoquinoline, 6,7-dimethoxy-3,4-diphenyl- (CA INDEX NAME)



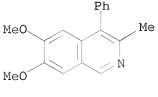
RN 385416-26-2 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 6,7-dimethoxy-4-phenyl-, ethyl ester (CA INDEX NAME)



RN 385416-28-4 HCAPLUS

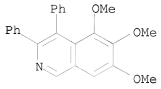
CN Isoquinoline, 6,7-dimethoxy-3-methyl-4-phenyl- (CA INDEX NAME)



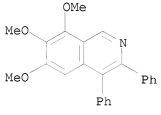
RN 385416-39-7 HCAPLUS

stn

CN Isoquinoline, 5,6,7-trimethoxy-3,4-diphenyl- (CA INDEX NAME)



RN 385416-42-2 HCAPLUS
CN Isoquinoline, 6,7,8-trimethoxy-3,4-diphenyl- (CA INDEX NAME)



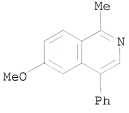
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:658540 HCAPLUS
DOCUMENT NUMBER: 135:371618
TITLE: Isoquinoline syntheses via A2-oxazolines. Part VIII. Cyclization of 2-acetamido-1,2-diphenylethan-1-ol derivatives into isoquinoline systems
AUTHOR(S): Kopczynski, T.; Voelkel, A.
CORPORATE SOURCE: Institute of Chemical Technology and Engineering, Poznan Technical University, Poznan, 60-965, Pol.
SOURCE: Polish Journal of Chemistry (2001), 75(9), 1317-1325 CODEN: PJCHDQ; ISSN: 0137-5083
PUBLISHER: Polish Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:371618
AB The results of the conversion of 2-acetamido-1,2-diphenylethan-1-ol derivs. into 1-methyl-4-phenylisoquinoline derivs. were described. The mechanism proposed for these reaction assumes the existence of protonated A2-oxazolines, carbonium ions, and unsatd. amides as intermediates. For example, the cyclization of erythro-N-(2-hydroxy-1,2-diphenylethyl)acetamide or threo-N-(2-hydroxy-1,2-diphenylethyl)acetamide gave 1-methyl-4-phenylisoquinoline in 66% yield.
IT 374594-09-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of isoquinolines via cyclocondensation of N-(hydroxydiphenylethyl)acetamide derivs.)
RN 374594-09-9 HCAPLUS

Updated Search

stn

CN Isoquinoline, 6-methoxy-1-methyl-4-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

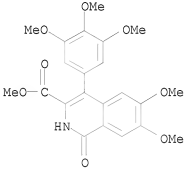
L6 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:355514 HCAPLUS
DOCUMENT NUMBER: 135:76771
TITLE: Novel, potent, and selective phosphodiesterase 5 inhibitors: synthesis and biological activities of a series of 4-aryl-1-isoquinolinone derivatives
AUTHOR(S): Ukita, Tatsuzo; Nakamura, Yoshinori; Kubo, Akira; Yamamoto, Yasuo; Moritani, Yasunori; Saruta, Kunio; Higashijima, Takanori; Kotera, Jun; Takagi, Michino; Kikkawa, Kohei; Omori, Kenji
CORPORATE SOURCE: Discovery Research Laboratory, Tanabe Seiyaku Co. Ltd., Yodogawa Osaka, 532-8505, Japan
SOURCE: Journal of Medicinal Chemistry (2001), 44(13), 2204-2218
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:76771
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

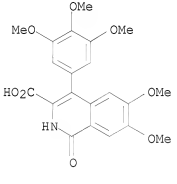
AB A novel class of potent and selective phosphodiesterase 5 (PDE5) inhibitors, the hydrochlorides of 4-aryl-1-isoquinolinone derivs. such as I (R = H, cyclopentyl, morpholino, etc.) designed by the comparison of the structure of cGMP and a previously reported 1-arylnaphthalene lignan, was disclosed. 4-Aryl-1-isoquinolinone derivs. such as the hydrochlorides of I (R = H, cyclopentyl, morpholino, etc.) were prepared and studied as potent and selective inhibitors of phosphodiesterase 5 (PDE5). I were designed by anal. of the structures of cGMP and a previously reported 1-arylnaphthalene lignan. Among these compds., the dihydrochloride of Me 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trim ethoxyphenyl)-3-isoquinoline carboxylate (II) exhibited potent PDE5 inhibitory activity (IC50 = 1.0 nM) with high isoenzyme selectivities (IC50 ratio: PDE1/PDE5 = 1300, PDE2/PDE5 > 10 000, PDE3/PDE5 > 10 000, PDE4/PDE5 = 4700, PDE6/PDE5 = 28). Compound II also showed the most potent

relaxant effect on isolated rabbit corpus cavernosum (EC30 = 7.9 nM). Isoquinolinone compound III (T-1032), the sulfate salt of II, was selected for further biol. and pharmacol. evaluation of erectile dysfunction.

IT 212489-49-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of arylisoquinolinone derivs. as selective inhibitors of phosphodiesterase 5 and as potential agents for the treatment of erectile dysfunction)
RN 212489-49-1 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)



IT 212489-07-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of arylisoquinolinone derivs. as selective inhibitors of phosphodiesterase 5 and as potential agents for the treatment of erectile dysfunction)
RN 212489-07-1 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

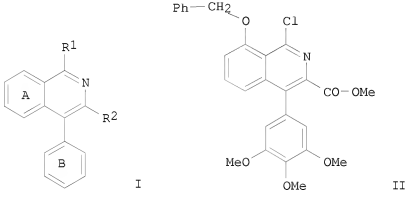


REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:712977 HCAPLUS
DOCUMENT NUMBER: 133:281699
TITLE: Preparation of isoquinoline derivatives as phosphodiesterase V inhibitors
INVENTOR(S): Ukita, Shinzo; Yamada, Koichiro; Ohmori, Kenji; Yoshikawa, Kohei
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 49 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000281654	A	20001010	JP 1999-83022	19990326
PRIORITY APPLN. INFO.:			JP 1999-83022	19990326
OTHER SOURCE(S):	MARPAT 133:281699			

GI



I II

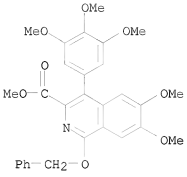
AB The title compds. I [ring A = benzene ring with substituents; ring B = (un)substituted benzene ring; R1 = (un)substituted alkoxy, halo, etc.; R2 = CO2R3, etc.; R3 = H, etc.], useful as phosphodiesterase V inhibitors (no data) for the treatment of circulatory system diseases (no data), are prepared For example, the title compound II was prepared

IT 299167-15-0P 299167-17-2P 299167-19-4P
299167-21-8P 299167-23-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinoline derivs. as phosphodiesterase V inhibitors)

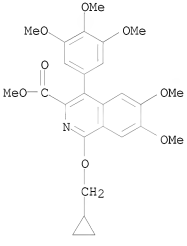
RN 299167-15-0 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 6,7-dimethoxy-1-(phenylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)

stn

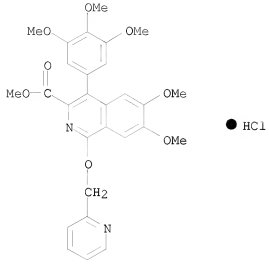


RN 299167-17-2 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1-(cyclopropylmethoxy)-6,7-dimethoxy-4-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)

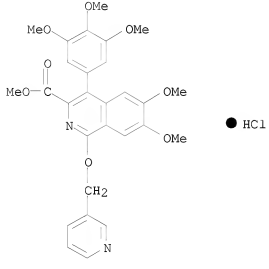


RN 299167-19-4 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 6,7-dimethoxy-1-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, hydrochloride (1:1) (CA INDEX NAME)

stn



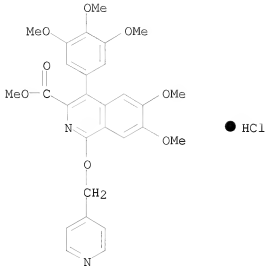
RN 299167-21-8 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 6,7-dimethoxy-1-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, hydrochloride (1:1) (CA INDEX NAME)



RN 299167-23-0 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 6,7-dimethoxy-1-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, hydrochloride (1:1) (CA INDEX NAME)

Updated Search

stn



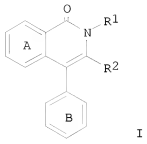
L6 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:151451 HCAPLUS
DOCUMENT NUMBER: 132:207769
TITLE: Preparation of isoquinolinones as effective component in medicine
INVENTOR(S): Ukita, Shinzo; Ohmori, Kanji; Ikeo, Tomihiro
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 148 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000072675	A	20000307	JP 1998-240446	19980826
PRIORITY APPLN. INFO.:			JP 1998-240446	19980826

OTHER SOURCE(S): MARPAT 132:207769
GI

Updated Search

stn



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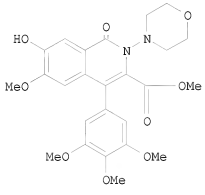


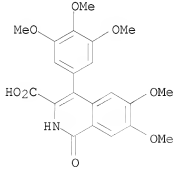
II

AB Title compds. [I; ring A and ring B equivalent or different, substituted or unsubstituted benzene ring; R1 = H, N(CH3)2, 4-H2NC6H4, 4-CH3OCOC6H4, alkyl, cycloalkyl, aryl, complex cyclic; R2 = COOH, COOCH3, COOCH2CH3, COOCH2C6H5, COO(CH2)3CH3] and pharmaceutical acceptable salts are prepared and tested as PDEV inhibitors. The title compound II was prepared

IT 212489-07-1P 212489-10-6P 212489-49-1P
212500-07-7P 212500-10-2P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinolinones as effective component in medicine)

RN 212489-07-1 HCAPLUS

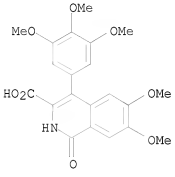
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)



Updated Search

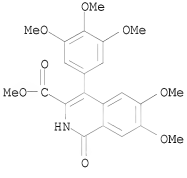
stn

RN 212489-10-6 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, sodium salt (1:1) (CA INDEX NAME)



● Na

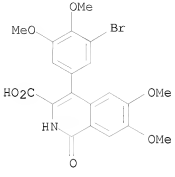
RN 212489-49-1 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)



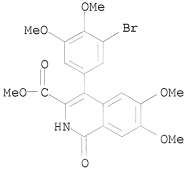
RN 212500-07-7 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo- (CA INDEX NAME)

Updated Search

stn



RN 212500-10-2 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-, methyl ester (CA INDEX NAME)



L6 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:608601 HCAPLUS
DOCUMENT NUMBER: 129:216521
ORIGINAL REFERENCE NO.: 129:44019a,44022a
TITLE: Preparation of 1-isoquinolinone-3-carboxylates as PDE V inhibitors
INVENTOR(S): Ukita, Tatsuzo; Omori, Kenji; Ikeo, Tomihiro
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: PCT Int. Appl., 299 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

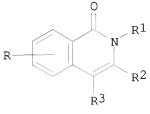
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9838168	A1	19980903	WO 1998-JP715	19980223
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,				

Updated Search

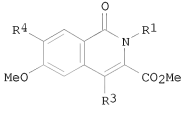
	US, UZ, VN, YU, ZW						
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG						
IN	1998MA00345	A	20050304	IN	1998-MA345		19980220
AU	9862300	A	19980918	AU	1998-62300		19980223
JP	10298164	A	19981110	JP	1998-44139		19980226
PRIORITY APPLN. INFO.:				JP	1997-44408	A	19970227
				WO	1998-JP715	W	19980223

OTHER SOURCE(S): MARPAT 129:216521

GI



I



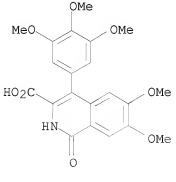
II

AB Title compds. [I; R = H or substituent(s); R1 = H, NH2, (cyclo)alkyl, heterocyclyl, aryl, etc.; R2 = (esterified) CO2H, CONH2, N-attached heterocyclylcarbonyl, etc.; R3 = (un)substituted Ph] were prepared as PDE V inhibitors (no data). Thus, 5-benzyloxy-4-methoxy-2-(3,4,5-trimethoxybenzoyl)benzoic acid was cyclocondensed with CH2(CO2CMe3)2 and the hydrated product cyclocondensed with 4-(H2N)C6H4NHCO2CMe3 to give, in 4 addnl. steps, title compound II [R1 = C6H4(NH2)-4, R3 = C6H2(OMe)3-3,4,5, R4 = 2-pyridylmethoxy].

IT 212489-07-1P 212489-10-6P 212489-49-1P
212500-07-7P 212500-10-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-isoquinolinone-3-carboxylates as PDE V inhibitors)

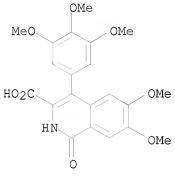
RN 212489-07-1 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)



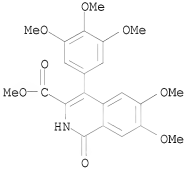
stn

RN 212489-10-6 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, sodium salt (1:1) (CA INDEX NAME)



● Na

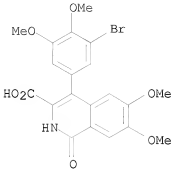
RN 212489-49-1 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6,7-dimethoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)



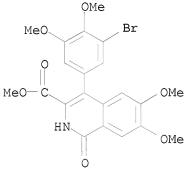
RN 212500-07-7 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo- (CA INDEX NAME)

Updated Search

stn



RN 212500-10-2 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:211847 HCAPLUS
DOCUMENT NUMBER: 128:294669
ORIGINAL REFERENCE NO.: 128:58399a,58402a
TITLE: Synthesis of 7,12-dihydro-12-phenyl-5H-6,12-methanodibenz[c,f]azocines via N,N-dibenzylphenacylamines
AUTHOR(S): Coskun, Necdet; Buyukuysal, Levent
CORPORATE SOURCE: Dep. Chem., Uludag Univ., Bursa, 16059, Turk.
SOURCE: Heterocycles (1998), 48(1), 53-59
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 128:294669
GI

Updated Search

stn

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB N,N-Dibenzylphenacylamines I (R1 = R2 = MeO, R3 = R4= R5 = R6 = H; R1 = R6 = H, R2 = R3 = R4 = R5 = MeO; R1R2 = OCH2O, R3 = R6 = H, R4 = R5 = MeO; etc.) were prepared in high yields by a one-pot reaction and cyclized at room temperature to give 7,12-dihydro-12-phenyl-5H-6,12-methanodibenz[c,f]azocines II in high yields. 95% H2SO4 or 70% HClO4 was used as cyclization catalysts. The double-cyclization proceeds smoothly in the cases where electron-donating groups are present in both benzene rings. N-2,3-dimethoxybenzyl-N-benzylphenacylamine gave the corresponding N-benzyl-1,2-dihydro-4-phenylisoquinoline on treatment with 95% H2SO4 while N-3,4-dimethoxybenzyl-N-benzylphenacylamine at the same reaction conditions and reaction time cyclized to the corresponding dibenzazocine. However, N-3,4-dimethoxybenzyl-N-benzylphenacylamine gave the corresponding dihydroisoquinoline which disproportionates to give N-benzyl-1,2,3,4-tetrahydro-4-phenylisoquinoline and N-benzyl-4-phenylisoquinolinium when treated at 70% perchloric acid at room temperature

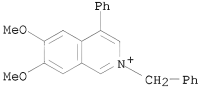
IT 206126-10-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of phenylmethanodibenzazocines by cyclization of dibenzylphenacylamines)

RN 206126-10-5 HCAPLUS

CN Isoquinolinium, 6,7-dimethoxy-4-phenyl-2-(phenylmethyl)-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 206126-09-2
CMF C24 H22 N O2



CM 2

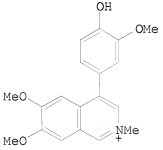
CRN 14797-73-0
CMF Cl O4

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

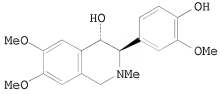
Updated Search

stn

L6 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:224821 HCAPLUS
DOCUMENT NUMBER: 104:224821
ORIGINAL REFERENCE NO.: 104:35659a,35662a
TITLE: The synthesis of a 4-phenylisoquinoline from a 3-phenylisoquinoline by utilization of a nitrogen analog of the pinacol rearrangement
AUTHOR(S): Cushman, Mark; Mohan, Prem
CORPORATE SOURCE: Sch. Pharm. Pharm. Sci., Purdue Univ., West Lafayette, IN, 47907, USA
SOURCE: Tetrahedron Letters (1985), 26(38), 4563-6
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:224821
GI



I



II

AB The nitrogen analog of the pinacol rearrangement was used for the preparation of a 4-phenylisoquinoline I from the intermediate amino alc. II.
IT 102349-19-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 102349-19-9 HCAPLUS
CN Isoquinolinium, 4-(4-hydroxy-3-methoxyphenyl)-6,7-dimethoxy-2-methyl-, chloride (1:1) (CA INDEX NAME)

Updated Search

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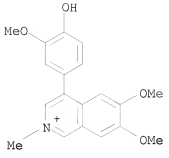
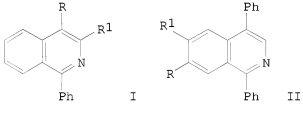


L6 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:527463 HCAPLUS
DOCUMENT NUMBER: 97:127463
ORIGINAL REFERENCE NO.: 97:21153a,21156a
TITLE: A reinvestigation of the Pictet-Gams isoquinoline synthesis. Part 2. Formation of rearranged isoquinolines: the Δ2-oxazoline-isoquinoline transformation
AUTHOR(S): Ardabilchi, Nasser; Fitton, Alan O.; Haidi, A. Hamid b. A.; Thompson, J. Robin
CORPORATE SOURCE: Dep. Chem. Appl. Chem., Univ. Salford, Salford, M5 4WT, UK
SOURCE: Journal of Chemical Research, Synopses (1982), (6), 156-7
CODEN: JRPSDC; ISSN: 0308-2342
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 97:127463
GI



AB Cyclization of 2-substituted 2-acylamino-1-arylalkan-1-ols with P2O5 in refluxing decalin gave rearranged, i. e., 4-substituted, isoquinolines in addition to the expected 3-substituted isomers. E.g., erythro-PhCH(OH)CH(CHMe2)NHBz cyclized to give 37% of a 31:69 mixture of isoquinolines I (R = H, R1 = CHMe2; R = CHMe2, R1 = H). With erythro-PhCH(OH)CHRNHBz (R = C6H4OMe-3, -4), the 4-substituted isoquinolines II (R = H, R1 = OMe; R = OMe, R1 = H), resp., were obtained

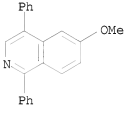
Updated Search

exclusively in 76 and 88% yields. The reaction involves 5-phenyl-Δ2-oxazoline intermediates; the formation of the rearranged isoquinolines from the intermediates is discussed.

IT 82894-69-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 82894-69-7 HCAPLUS

CN Isoquinoline, 6-methoxy-1,4-diphenyl- (CA INDEX NAME)



L6 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:125225 HCAPLUS

DOCUMENT NUMBER: 82:125225

ORIGINAL REFERENCE NO.: 82:20003a,20006a

TITLE: Formation of some isochromene derivatives during the reaction of veratryl ketones and veratric acid with benzoin

AUTHOR(S): Kuznetsov, E. V.; Pruchkin, D. V.; Bicherov, A. V.; Dorofeenko, G. N.

CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1974), (11), 1575
CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

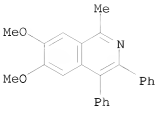
AB Benzopyrylium perchlorates (I; R = Me, Ph, p-MeOC6H4) were obtained in 40-60% yields by heating 3,4-(MeO)2C6H3COR with PhCH(OH)COPh in the presence of polyphosphoric acid 1 hr at 120-30°. Treatment of I with NH4OAc gave isoquinolines (II). Treatment of veratric acid with benzoin similarly gave 12% isocoumarin (III) which could be transformed into I (R = Me) by MeMgI.

IT 27922-95-8P 55542-77-3P 55542-78-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

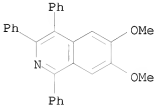
RN 27922-95-8 HCAPLUS

CN Isoquinoline, 6,7-dimethoxy-1-methyl-3,4-diphenyl- (CA INDEX NAME)

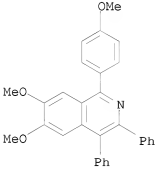
stn



RN 55542-77-3 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-1,3,4-triphenyl- (CA INDEX NAME)



RN 55542-78-4 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-1-(4-methoxyphenyl)-3,4-diphenyl- (CA INDEX NAME)



L6 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1970:132239 HCAPLUS
DOCUMENT NUMBER: 72:132239
ORIGINAL REFERENCE NO.: 72:23667a,23670a
TITLE: Use of polyphosphoric acid in the synthesis of ω,ω-diaryl-substituted acetophenones; 3,4-diaryl-substituted 2-benzopyrylium salts and isoquinolines based on them
AUTHOR(S): Kuznetsov, E. V.; Dorofeenko, G. N.
CORPORATE SOURCE: Rostov.-na-Donu Gos. Univ., Rostov-on-Don, USSR
SOURCE: Zhurnal Organicheskoi Khimii (1970), 6(3), 578-81
CODEN: ZORKAE; ISSN: 0514-7492

Updated Search

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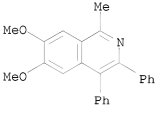
DOCUMENT TYPE: Journal
LANGUAGE: Russian

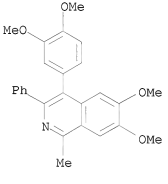
AB Condensation of veratrole with BZCH(OH)Ph, PhCH(OH)CO2H, or BZCHO in polyphosphoric acid gave 62-8% 3,4-(MeO)2C6H3-CHRCOR1 (I) (R, R1 given): Ph, Ph; Ph, 3,4-(MeO)2C6H3; 3,4-(MeO)2C6H3, Ph; resp. Heating I (R = R1 = Ph) with Ac2O and HClO4 gave 6,7-dimethoxy-3,4-diphenyl-1-methyl-2-benzopyrylium perchlorate. Similarly, 6,7-dimethoxy-1,3,4-triphenyl-2-benzopyrylium and 6,7-dimethoxy-1-benzyl-3,4-diphenyl-2-benzopyrylium perchlorates were prepared 6,7-Dimethoxy-3,4-diphenyl-1-methylisoquinoline, and 1-benzyl-6,7-dimethoxy-3,4-diphenylisoquinoline were prepared from NH3 and the resp. perchlorate.

IT 27922-95-8P 27922-96-9P 27922-97-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 27922-95-8 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-1-methyl-3,4-diphenyl- (CA INDEX NAME)

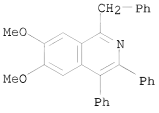


RN 27922-96-9 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-3-phenyl- (CA INDEX NAME)



RN 27922-97-0 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-3,4-diphenyl-1-(phenylmethyl)- (CA INDEX NAME)

Updated Search



L6 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:50634 HCAPLUS
DOCUMENT NUMBER: 52:50634
ORIGINAL REFERENCE NO.: 52:9128d-h
TITLE: Synthesis of derivatives of 4-(3,4-dimethoxyphenyl)-6,7-dimethoxyisoquinoline
AUTHOR(S): Quelet, Raymond; Mansouri, Mehdi; Pineau, Robert
CORPORATE SOURCE: Fac. Sci., Paris
SOURCE: Compt. rend. (1957), 245, 537-9
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 52:50634

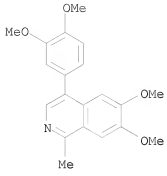
AB An earlier note (C.A. 50, 8535e) described the condensation of veratrole with aminodiethylacetal to give 1,1-bis-(3,4-dimethoxyphenyl)-2-aminoethane (I) (80% yield) in AcOH in the presence of H_2SO_4. The N-Ac, N-Pr, and N-Bu derivs. (II) of I were obtained when the corresponding N-acylaminoacetals were used in the condensation. Compound I and its N-acyl derivs. were transformed into isoquinolines in order to compare the physiological properties of these products with those of papaverine. Using the method of Pictet and Spengler (C.A. 5, 3423) 5 g. I, 10 cc. MeOH, 5 cc. 40% formalin, and 10 cc. concentrated HCl was mixed and refluxed 2 hrs. giving 70% 6,7-dimethoxy-4- (3,4 - dimethoxyphenyl) - 1,2,3,4 - tetrahydroisoquinoline (III), m. 147° (MeOH); HCl salt, m. 240°; picrate, m. 233°. An attempt at Pd-catalyzed dehydrogenation of III was unsuccessful. II refluxed with $POCl_3$ in toluene (method of Pictet and Finkelstein, C.A. 3, 2435; Ber. 42, 1979(1909), and Decker, and Kropp, C.A. 3, 2455) gave 3,4-dihydro-6,7 - dimethoxy-4- (3,4 - dimethoxyphenyl) - 1 -alky' (or aryl) isoquinolines (IV), yield 60-75%. The following IV were reported (1-substituent, m.p. of base, HCl salt, and picrate given): Me, 70°, 191-2°, 220-1°; Et, 129°, -, 190-1°; Ph, 129-30°, 163-4°, 167-8°. IV were dehydrogenated in 80% yield to the corresponding isoquinolines (V) by Pd in boiling PhMe. The following V were reported (1-substituent, m.p. of base, HCl salt, and picrates given): Me, 207-8°, 211-12°, 240°; Et, 176°, -, 222-3°; Ph, 105-7°, -, 224°.

IT 102012-78-2 102948-36-7
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 102012-78-2 HCAPLUS

CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-, hydrochloride (1:1) (CA INDEX NAME)

stn

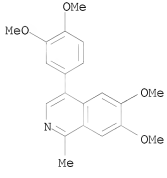


● HCl

RN 102948-36-7 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

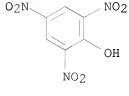
CM 1

CRN 102012-79-3
CMF C20 H21 N O4



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



Updated Search

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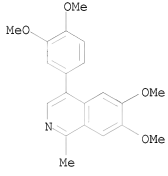
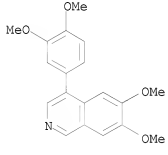
IT 102012-79-3, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl- (and derivs.)
RN 102012-79-3 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl- (CA INDEX NAME)



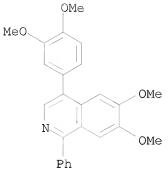
IT 109614-11-1, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (derivs.)
RN 109614-11-1 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (CA INDEX NAME)



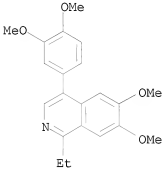
IT 102891-93-0P, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-phenyl- 111719-66-5P, Isoquinoline, 4-(3,4-dimethoxyphenyl)-1-ethyl-6,7-dimethoxy- 114839-77-9P, Isoquinoline, 4-(3,4-dimethoxyphenyl)-1-ethyl-6,7-dimethoxy-, picrate 115485-51-3P, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-phenyl-, picrate
RL: PREP (Preparation)
(preparation of)
RN 102891-93-0 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-phenyl- (CA INDEX NAME)

Updated Search

stn



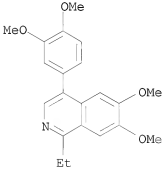
RN 111719-66-5 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-1-ethyl-6,7-dimethoxy- (CA INDEX NAME)



RN 114839-77-9 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-1-ethyl-6,7-dimethoxy-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

CM 1

CRN 111719-66-5
CMF C21 H23 N O4

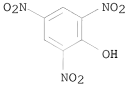


Updated Search

stn

CM 2

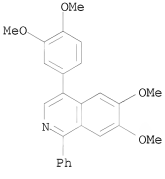
CRN 88-89-1
CMF C6 H3 N3 O7



RN 115485-51-3 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-phenyl-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

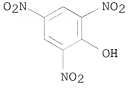
CM 1

CRN 102891-93-0
CMF C25 H23 N O4



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



L6 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN

Updated Search

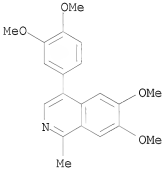
stn

ACCESSION NUMBER: 1958:50633 HCAPLUS
DOCUMENT NUMBER: 52:50633
ORIGINAL REFERENCE NO.: 52:9128b-d
TITLE: Reaction of phenyl- and p-tolyllithium with 1-arylisoquinolines
AUTHOR(S): Gilman, Henry; Soddy, Theodore
CORPORATE SOURCE: Iowa State Coll., Ames
SOURCE: Journal of Organic Chemistry (1957), 22, 1716-17
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The addition of aryllithium reagents to 1-arylisoquinolines was studied. 1-p-Tolyl- (I) and 1-phenylisoquinoline (II) treated with PhLi (III) and p-MeC6H4Li (IV), resp., gave in each case 1-phenyl-p-(1-tolyl)-1,2-dihydroisoquinoline (V). This fact was demonstrated by mixed decomposition point and identical infrared spectra. Both of the spectra contained a 1,4-disubstituted Ph band at 12.3 μ, a Ph ring band at 6.15 μ, and an NH band at 3.1 μ. II (16 g.) in 200 ml anhydrous Et2O was treated dropwise with 0.08 mole IV in 90 ml. Et2O; after the addition of 2, 5, and 8 ml. IV solution the reaction became red, brown, and finally dark green in color; the green color was present throughout the remainder of the addition On completion of the addition the mixture refluxed 45 min., hydrolyzed with saturated NH4Cl, and the Et2O extract dried, the Et2O removed, and the residue dissolved in alc., treated with C, filtered, and evaporated gave 0.5 g. V, decompose 176-8°. I (19 g.) in 200 ml. Et2O treated with 0.09 mole III in 100 ml. Et2O and the mixture worked up as in the preceding method gave 0.5 g. V.

IT 102012-78-2 102948-36-7
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 102012-78-2 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

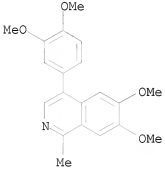
RN 102948-36-7 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

Updated Search

stn

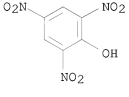
CM 1

CRN 102012-79-3
CMF C20 H21 N O4



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



L6 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:40607 HCAPLUS
DOCUMENT NUMBER: 52:40607
ORIGINAL REFERENCE NO.: 52:7320a-i,7321a
TITLE: Cyclic nitrones. II. Polymers of 2,3,4,5-tetrahydropyridine N-oxide and related compounds
AUTHOR(S): Thesing, Jan; Mayer, Hans
CORPORATE SOURCE: Tech. Hochschule, Darmstadt, Germany
SOURCE: Justus Liebigs Annalen der Chemie (1957), 609, 46-57
CODEN: JLACBF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 52:40607
AB cf. C.A. 51, 10516a. N-Hydroxypiperidine (Ia) (0.04 mole) with 0.2 mole KOH in 50 cc. H2O at 20-5° was treated dropwise with 0.08 mole K3Fe(CN)6 in 80 cc. H2O, diluted with H2O and kept 2 hrs. at 20° in the dark, cooled to 0° saturated with K2CO3, and extracted with CHCl3 giving 97% (C5H9ON)3 (I) (mol. weight in C6H6 268-318), exploding on

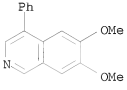
Updated Search

attempted distillation in vacuo, pH 8-9 in H2O. After standing 3 weeks, I gave an orange mass, which in aqueous Me2CO cooled to -15° yielded 41% (C5H9ON)2 (II), m. 126-7° (described previously, loc. cit.), and unidentified high polymers. I (0.85 g.) within 2 hrs. after preparation was hydrogenated in 75 cc. N HCl with PtO2 at 20°/760 mm. giving 98.5% (crude yield) Ia.HCl, m. 142-3°. II (0.3 g.) in 20 cc. 2N HCl was added promptly to 40 cc. 20% NaOH at 20°, cooled to 0°, saturated with K2CO3, and extracted with CHCl3 giving I quantitatively. When II in HCl was kept 12 hrs. prior to treatment with NaOH, the mol. weight of the resulting product rose from 297 to 402. To 26.7 g. PhMgBr in 70 cc. absolute Et2O was added dropwise freshly prepared I in 100 cc. Et2O and the mixture refluxed 4 hrs. giving a brown oil crystallizing gradually at 20°, which was decomposed with alkaline aqueous NH4Cl and extracted with Et2O yielding 2-Ph derivative (III) of Ia, m. 111-12° (petr. ether) (described previously, loc. cit.). III (6.2 g.) in 160 cc. Me2CO and 16 cc. H2O was treated within 1-2 min. with 15.2 g. yellow HgO, shaken 1.5 hrs., kept 16 hrs., filtered, and washed with Me2CO. The evaporated filtrate gave 6.13 g. oil which after 6 days at 0° triturated with little AcOEt gave 1.76 g. colorless dimer (IV) of the 2,3,4,5-tetrahydro-2-phenylpyridine N-oxide, C22H26O2N2, m. 200-1° (decomposition) (iso-Am2O); the m.p. varies with rate of heating. In weakly alkaline solution IV gradually gave a pink color with triphenyltetrazolium chloride (V). IV (0.4 g.) in hot iso-Am2O with 0.8 g. PhMgBr in 10 cc. Et2O was refluxed and stirred at 110-20°, cooled, decomposed with NH4Cl in dilute NH4OH, and extracted with Et2O giving 0.56 g. oil, which triturated with MeOH gave 0.21 g. 6-Ph derivative (VI) of III, m. 165-6° (EtOH), giving an immediate red color with V. VI (0.25 g.) in 25 cc. warm H2O and 6 cc. HCl heated 3 hrs. at 100° with Zn dust, cooled, and made alkaline with concentrated NaOH gave 0.22 g. crude iso-2,6-diphenylpiperidine, identified as the HCl salt, m. 224-5°; HBr salt, m. 258-9°, and HI salt, m. 256-7° (cf. Gilman and Edward, C.A. 48, 3974f), identical with those prepared from 2,6-diphenylpyridine reduced with EtOH and Na. To 16.8 g. 1,2,3,4-tetrahydroisoquinoline (VII) was added dropwise 12.8 g. CH2:CHCO2Et and the mixture heated 1 hr. at about 90-100° giving 24.25 g. N-carbethoxyethyl-1,2,3,4-tetrahydroisoquinoline (VIII), b15 188-9°. To 12 g. VIII in 100 cc. absolute Et2O at 0-5° was added 180 cc. Et2O containing o-HO2CC6H4CO3H [Organic Syntheses, Collective Volume III, 619(1955)] giving a viscous oil from which the Et2O solution (IX) was decanted. The oil in 100 cc. 2N NaOH saturated with K2CO3 was heated 1 hr. at 80-90°, diluted with 100 cc. H2O, and extracted with Et2O (including extract IX) giving 37-45% crude 2-hydroxy-1,2,3,4-tetrahydroisoquinoline (X), purified through its HCl salt, m. 153-4° (Me2CO); this with aqueous NaOH gave X, m. 80-1° (cyclohexane), giving an immediate red color with V [picrate of X, m. 143-4° (H2O)]. Crude X decomposed rapidly in a desiccator; pure X proved quite stable. X, prepared from VII in aqueous Me2CO with H2O2, was obtained in only 2% yield [cf. Maass and Wolffenstein, Ber. 30, 2189(1897) and 31, 2687(1898) who termed X "o-aminomethylphenylacetaldehyde" (m. 76-7°)]. X (0.48 g.) in 15 cc. Me2CO and 1.5 cc. H2O was shaken 1.5 hrs. with 1.4 g. HgO; the evaporated filtrate gave the crude nitrone, 3,4-dihydroisoquinoline N-oxide (XI), purified through the picrate, m. 142.5-3.5° (MeOH), 0.84 g. of which was warmed at

50° with 18% HCl, extracted with PhNO2 and Et2O, and the aqueous phase poured into 40 cc. 2N NaOH at 0° over a layer of CHCl3, saturated with K2CO3, and well shaken. The CHCl3 extract gave 0.3 g. hygroscopic XI, m. 56-7° (after evaporation, keeping 14 days at 0°, triturating with absolute Et2O, and drying over P2O5). XI gave no color with V. The marked differences in the HgO dehydrogenations of III and X are discussed fully and explained on the basis of configurational analyses. Ultraviolet spectra of XI and of benzaldehyde N-methylnitrone and the infrared spectrum of IV are given and discussed. 27 references.

IT 108973-36-0 112685-68-4
(Derived from data in the 6th Collective Formula Index (1957-1961))

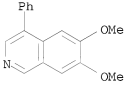
RN 108973-36-0 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



RN 112685-68-4 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-4-phenyl-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

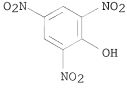
CM 1

CRN 108973-36-0
CMF C17 H15 N O2



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

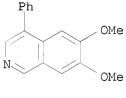


L6 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:40606 HCAPLUS
DOCUMENT NUMBER: 52:40606
ORIGINAL REFERENCE NO.: 52:7319h-i,7320a
TITLE: Syntheses of isoquinoline derivatives of pharmacological interest
AUTHOR(S): Deshpande, V. N.; Nargund, K. S.
CORPORATE SOURCE: Karnatak Univ., Dharwar, India
SOURCE: Journal of the Karnatak University (1956), 1, 15-18
CODEN: JKAUAR; ISSN: 0453-3348
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The β,β-diarylsubstituted ethylamine (0.005 mole) was treated with 40% formalin (slight excess over 0.008 mole). The intermediate Schiff bases were obtained as pastes and were cyclized by the action of 24% HCl. Isoquinoline bases thus formed were characterized by the formation of picrates. The bases (0.250 g.) were dehydrogenated by 10% Pd-C by heating the mixture at 210-15° for 15 min. and the resulting isoquinoline derivs. were isolated as the picrate. Below are given compds. and m.ps. of the tetrahydroisoquinoline base, its picrate, and the picrate of the isoquinoline base: 4-(3,4-dimethoxyphenyl) -6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline, 106°, 195°, 269°; 4-(4-methoxyphenyl)-7-methoxy-1,2,3,4-tetrahydroisoquinoline, 92°, 240°, 168°; 4-phenyl-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline, 173°, 219°, 236°; 4-(4-methoxyphenyl)-1,2,3,4-tetrahydroisoquinoline, 76°, 163°, 244°; 4-(2,4-dimethoxyphenyl)-1,2,3,4-tetrahydroisoquinoline, 182°, 230°, 204°.

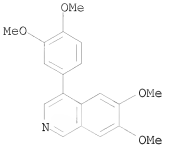
IT 108973-36-0P, Isoquinoline, 6,7-dimethoxy-4-phenyl-
109614-11-1P, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-
112685-68-4P, Isoquinoline, 6,7-dimethoxy-4-phenyl-, picrate
113751-11-4P, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-, picrate
RL: PREP (Preparation)
(preparation of)

RN 108973-36-0 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-4-phenyl- (CA INDEX NAME)



RN 109614-11-1 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (CA INDEX NAME)

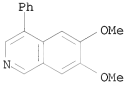
stn



RN 112685-68-4 HCAPLUS
CN Isoquinoline, 6,7-dimethoxy-4-phenyl-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

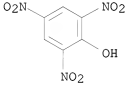
CM 1

CRN 108973-36-0
CMF C17 H15 N O2



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



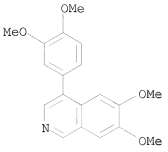
RN 113751-11-4 HCAPLUS
CN Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-, compd. with 2,4,6-trinitrophenol (1:1) (CA INDEX NAME)

CM 1

CRN 109614-11-1
CMF C19 H19 N O4

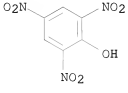
Updated Search

stn



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



L6 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1955:53526 HCAPLUS
DOCUMENT NUMBER: 49:53526
ORIGINAL REFERENCE NO.: 49:10280f-i,10281a-i,10282a-i,10283a-d
TITLE: Hypotensive methoxyisoquinolines
AUTHOR(S): Walker, Gordon N.
CORPORATE SOURCE: Natl. Heart Inst., Bethesda, MD
SOURCE: Journal of the American Chemical Society (1954), 76, 3999-4003
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Dehydronorcoralydine iodide (I) was synthesized. The HCl salts of 3-(3,4-dimethoxyphenyl)-6,7-dimethoxyisoquinoline (II), 1-methyl-4-(3,4-dimethoxyphenyl)-6,7-dimethoxyisoquinoline (III), 1-methyl-4-phenyl-6,7-dimethoxyisoquinoline (IV), 1-methyl-6,7-dimethoxyisoquinoline (V), and 5-methyl-2,3,10,11-tetramethoxybenzo[a]-phenanthridine (VI) were prepared by the POCl3 cyclization of the appropriate amides, dehydrogenation, and treatment with HCl. These compds. elicited a lowering of the blood pressure in normal dogs. N-(3,4-Dimethoxyphenylacetyl)homoveratrylamine (40 g.) refluxed 3 h. with 100 cc. POCl3 in 800 cc. PhMe, the mixture treated with excess alc. KOH, and diluted with H2O, and the product triturated with MeOH gave 30 g. (76%) 1-(3,4-dimethoxybenzoyl)-6,7-dimethoxy-3,4-dihydroisoquinoline (3,4-dihydropapaveraldine) (VII), m. 185-9° (recrystd. from EtOAc, colorless crystals, m. 190-2°) (all m.ps. are corrected), λmaximum 6.03, 6.25-6.40 μ. VII (30 g.) in 250 cc. glacial AcOH hydrogenated at

80° and 40 lb. pressure over 4.5 g. 10% Pd-C 5 h. (the catalyst was renewed twice during this period), the mixture filtered, the AcOH evaporated, the residual viscous oil dissolved in Et2O-MeOH, the solution saturated with cooling with HCl, and the resulting crystals triturated with absolute EtOH and dried in air yielded 22.2 g. (67%) 1,2,3,4-tetrahydropapaverine (VIII) HCl salt, colorless crystals, m. 195-206° [recrystd. from MeOH, m. 212-14° (decomposition)]. VIII.HCl (21 g.) in 300 cc. H2O and 7 cc. concentrated HCl treated with 20 cc. CH2O, the mixture heated 1 h. on the steam bath, the solution diluted with 400 cc. H2O, cooled, treated with excess KOH, refrigerated overnight, and filtered, the filter residue triturated with 150 cc. warm MeOH, the MeOH extract evaporated, and the residue recrystd. from
75
cc. MeOH yielded 7.3 g. (37%)crude product, m. 151-6°, which recrystd. from MeOH gave pure norcoralydine (IX) hemihydrate, colorless crystals, m. 159-61°; the MeOH-insol. crystals (8.0 g., 41%), m. 174-97° (decomposition), recrystd. from EtOAc gave 5.6 g. unidentified product, slightly greenish crystals (X), m. 202-5° [recrystd, m. 203-6° (partial decomposition)], λmaximum 2.82-2.85, 7.2, 9.1 μ. IX and X showed very similar IR spectra. IX (2.0 g.) treated in 300 cc. absolute EtOH with 5.5 g. iodine, the mixture refluxed 4 h., cooled, and filtered, the filter residue triturated several times with warm EtOAc, the resulting deep red complex, decomposing 223-6°, which could not be recrystd. because of decomposition, warmed with aqueous NaHSO3, and the resulting
yellow crystals washed with dilute HCl and H2O, dried in air, and recrystd. from MeOH gave 1.4 g. I, yellow crystals, m. 222.5-26° (decomposition) (varied with rate of heating), which appeared to be solvated. X treated with iodine in the same manner, and the resulting red complex, decomposing 222.5-26°, treated with aqueous NaHSO3 yielded I, m. 252-4° (decomposition) (from MeOH); mixed m.p. with I from IX, 252-5° (decomposition). I caused with 1.0 mg./kg. dog a slight and with 31 mg./kg. a marked fall of the blood pressure, with 15 mg./kg. a partial epinephrine block, with 7 mg. a partial TMA block; the fatal dose was 63 mg./kg.; it caused also tachycardia. Homoveratroyl chloride treated with veratrole in the presence of AlCl3 in CS2, and the mixture distilled gave 31% 3,3',4,4'-tetramethoxydeoxybenzoin (XI), colorless crystals, m. 104-6° (from MeOH), bl.0 240-70°; 2,4-dinitrophenylhydrazone, red-orange crystals, m. 197-9° (from EtOAc). XI treated with NH2OH.HCl in pyridine gave the oxime of XI, colorless crystals, m. 129-31°; the hydrogenation of the oxime in EtOH and EtOAc over Pd-C gave products which were not identical with α,β-di(3,4-dimethoxyphenyl)ethylamine (XII). 3,4-(MeO)2C6H3CHO (81 g.), 101 g. 3,4-(MeO)2C6H3CH2CO2H, 50.5 g. KOAc, and 230 cc. Ac2O refluxed 2 h., the solution diluted with 100 cc. MeOH and 2000 cc. H2O, and the precipitate washed with H2O, pressed dry, and triturated with Et2O gave 98 g. (58%) 3,4-(MeO)2C6H3CH:[3,4-(MeO)2C6H3] CCO2H (XIII), colorless crystals, m. 204-13° (recrystd. from EtOAc, m. 216-17°). XIII in glacial AcOH hydrogenated at 70° over 5% Pd-C, the mixture filtered, the filtrate evaporated, and the crude product (100%) recrystd. from MeOH gave α,β-di(3,4-dimethoxyphenyl)propionic acid (XIV), colorless crystals, m. 143-5°. XIV (83 g.) esterified with absolute EtOH in the presence of 5% concentrated H2SO4 yielded 73 g. (81%) crude Et ester (XV) of XIV, oil. BzCl (81.5 g.), 69.5 g. veratrole, and 89 g. AlCl3 in 300 cc. CS2 condensed in the usual manner, the resulting complex decomposed with ice and H2O, and the neutral product recrystd. from MeOH in 2 crops yielded 83 g. (68%) 3,4-(MeO)2C6H3Bz (XVI), m. 98-100°;

2,4-dinitrophenylhydrazone, red crystals, m. 256-7° (from EtOAc). XVI (41.3 g.), 36 g. BrCH2CO2Et, 50 g. activated Zn (30 mesh), and 500 cc. dry C6H6 refluxed 4 h., the mixture decomposed with dilute AcOH, the neutral product isolated in the usual manner and hydrogenated in glacial AcOH at 80° 1 h. over 10% Pd-C at 40 lb. pressure, the mixture filtered, and the filtrate evaporated gave 100% crude 3,4-(MeO)2C6H3CHPhCH2CO2Et, orange oil, suitable for further conversions. XI (23 g.), 200 cc. HCONH2, 100 cc. 90% HCO2H, and 50 g. HCO2NH4 distilled until the reflux temperature reached 165°, the mixture refluxed 9 h., cooled, and diluted with 3000 cc. H2O, and the crystalline precipitate washed with H2O and recrystd. from MeOH yielded 14 g.

(56%) N-CHO derivative (XVIII) of XII, m. 138-41° (recrystd. from MeOH, m. 141-3°), λmaximum 2.95, 5.94 μ. XIV refluxed 3 h. with 2 parts by weight anhydrous N2H4, the solution cooled and poured into 20 vols. ice water, and the crystalline precipitate washed with several portions H2O and dried in vacuo at room temperature yielded the hydrazide of XIV, colorless crystals, m. 140-2° (from MeOH). [3,4-(MeO)2C5H3CHCH2CONHNH2, colorless crystals, m. 240-2°, was obtained similarly from [3,4-(MeO)C6H3]2CHCH2CO2Et; in the same manner was prepared 3,4-(MeO)2C6H3CHPhCH2CONHNH2, colorless crystals, m. 113-15° (from MeOH), from XVII; and 1-(3,4-dimethoxyphenyl)-2-carboxy-6,7-dimethoxytetralin hydrazide (XIX), colorless, hygroscopic crystals, m. 180-1° (from MeOH, dried in vacuo at 100°), from the Et ester of the corresponding acid. Each of the hydrazides showed IR absorption bands at 2.94 and 5.98 μ. The acid hydrazide (0.1 mol) in 300 cc. glacial AcOH, 200 cc. concentrated HCl, and 200 cc. H2O treated with 600 cc. Et2O to form a 2nd phase, the mixture treated with cooling and stirring with 20 g. NaNO2 gradually during 0.5 h., diluted with 1 l. ice water, and shaken, the organic layer washed 4 times with H2O, with 3% aqueous NaOH until alkaline, and then with dilute AcOH, aqueous NaHCO3, and H2O, dried with MgSO4, treated immediately with 75 cc. glacial AcOH and 50 cc. Ac2O, and cautiously distilled to remove the Et2O, the residual liquid refluxed 2 h., the excess reagent evaporated, the residue treated with an equal volume Et2O containing a little Et2O, and the product recrystd. gave the rearrangement product. In this manner were prepared the N-Ac derivative (XX) of XII, m. 148-65° (recrystd. from EtOAc, colorless crystals, m. 160-3°), in 61% from XIII, λmaximum 2.94, 6.00 μ [XX gave hydrolyzed 4 h. with KOH in aqueous (HOCH2CH2)2O XII, colorless crystals, m. 106-10° (from EtOAc)]; [3,4-(MeO)2C6H3]2CHCH2NHAc (XXI), colorless crystals, m. 129-31° (from MeOH), in 52% yield from XI, λmaximum 2.94, 6.01 μ; 3,4-(MeO)2C6H3CHPhCH2NAc (XXII), colorless crystals, m. 154-6° (from MeOH), in 46% yield from XVI; and 1-(3,4-dimethoxyphenyl)-2-acetylamino-6,7-dimethoxytetralin (XXIII), m. 217-20° (recrystd. from MeOH, pale green crystals, m. 222-3.5°), in 73% yield from XIX, λmaximum 2.90, 6.00 μ.

The appropriate amide and dry PhMe (volume equal to 40 times the weight of the amide in g.) boiled until solution occurred, the warm solution treated with POCl3 (volume in cc. equal to twice the weight of the amide: the solution refluxed 2-3 h. after the spontaneous reaction subsided, cooled, diluted with 15 vols. pentane, and filtered, the precipitate dissolved in the min. amount hot absolute

EtOH, the hot solution treated with solid KOH until a strong alkaline reaction persisted, cooled, and diluted with cold H2O until no further separation occurred, the product extracted with Et2O-EtOAc (2-4 portions), and the extract washed with 2 portions H2O, dried, and evaporated at 70° gave the desired 3,4-dihydroisoquinoline (XXIV). The XXIV, an equal weight 10% Pd-C, and p-cymene (volume in cc. equal to 100 times the weight of the XXIV) distilled until the reflux temperature reached 175°, the residual mixture refluxed 2-4 h. and filtered hot, the filtrate recharged with the catalyst, refluxed 3 h., filtered, and evaporated, and the resulting isoquinoline recrystd.; if the product did not crystallize, it was dissolved in MeOHEtOAc and treated with dry HCl to give the crystalline HCl salt. XVIII (7.0 g.) cyclized in this manner, and the resulting brown, viscous oily XXIV (3.0 g.) dehydrogenated and triturated with MeOH gave 1.2 g. (18%) 3-(3,4-dimethoxyphenyl)-6,7-dimethoxyisoquinoline (II), m. 204-9° (recrystd. from MeOH, brilliant, pale-yellow leaflets, m. 212-14°), λmaximum 6.15 μ; HCl salt, yellow crystals, m. 232-5° (from MeOH), λmaximum 6.15 μ, showed at 50 mg./kg. a slow fall of the blood pressure, at 15 mg./kg., partial TMA block; the fatal dose was above 50 mg./kg. II refluxed 3 h. with EtI did not give an ethiodide. XXI (4.5 g.) cyclized and the product triturated with MeOH yielded 3.5 g. (82%) 3,4-dihydro derivative (XXV) of III, discolored crystals, m. 75-80° (recrystd. from MeOH, colorless crystals, m. 87-9°), λCHCl3max. 6.14 λ, soluble in dilute HCl. XXV (3.5 g.) dehydrogenated in the usual manner, and the product triturated with MeOH yielded 1.4 g. (40%) III, crystals, m. 205-7° (recrystd. from MeOH, pale greenish yellow crystals, m. 206-8°), λCHCl3max. 6.14 μ; HCl salt hemihydrate, pale yellow needles, m. 206-7° (decomposition) (dried in vacuo at 80°), 3.0 mg./kg. and up caused a sustained fall of the blood pressure, 31 mg./kg. gave epinephrine block and TMA block and caused convulsions and tachycardia; the fatal dose was above 63 mg./kg. III refluxed 1.5 h. with a large excess EtI, and the gradually separating yellow crystals recrystd. from MeOH gave III.MeI, bright yellow crystals, m. 219-23° (decomposition), which could not be analyzed successfully because of its hygroscopic properties; 7.0 mg./kg. cause a slight and 15 mg./kg. a marked fall of blood pressure; 7 mg./kg. gave an epinephrine shock with rapid recovery and a partial TMA block, and also caused tachycardia; the fatal dose was 76 mg./kg. XXII (19.5 g.) cyclized gave 18 g. viscous, red oil (λmaximum 5.80, 6.15 μ; soluble in dilute HCl); a 17-g. portion dehydrogenated in the usual manner, the resulting greenish glassy substance remaining after the evaporation of the p-cymene dissolved in MeOH-EtOAc, the solution treated with cooling with dry HCl, and the crystalline precipitate recrystd. from EtOAc containing the min. amount MeOH yielded 6.5 g. (33%) IV.HCl.0.5H2O, m. 173-5° (recrystd. from EtOAc-MeOH, colorless needles, m. 183-5° (decomposition) (dried in vacuo at 80°); 7.0 mg. caused a moderate, transient fall of blood pressure, 31 mg./kg. gave a TMA and a partial epinephrine block, fatal dose above 57 mg. 3,4-(MeO)2C6H3(CH2)2NHAc (14.2 g.) cyclized gave 3.6 g. (26%) 1-methyl-6,7-dimethoxy-3,4-dihydroisoquinoline (XXVI), m. 85-96° (recrystd. from cyclohexane, m. 102-4°), λmaximum 6.15 μ, moderately soluble in H2O. XXVI (3.2 g.) dehydrogenated gave a green glassy material which treated with HCl in MeOH-EtOAc and cooled yielded 2.5 g. (67%) V.HCl, m. 219-221° (decomposition) [recrystd, from MeOH-EtOAc, colorless crystals having a green cast, m. 226-8° (decomposition)]; 3.0 mg./kg. showed a slight and 31 mg. a moderate, sustained fall of blood

pressure, 53 mg./kg. gave an epinephrine and a TMA block; the fatal dose was above 53 mg./kg. XXVI (7.2 g.) cyclized gave 6.2 g. (91%) discolored crystals, m. 157-60°, which recrystd. from EtOAc gave the 7,8,15,16-tetrahydro derivative (XXVII) of VI, colorless crystals with a green-yellow cast, m. 160-2°, λCHCl3max. 6.21, 6.07, 6.18 μ. Crude XXVII (2.3 g.) dehydrogenated and the product triturated with MeOH yielded 1.6 g. (70%) VI, crystals, m. 191-3°, λCHCl3max. 6.18 μ; HCl salt, yellow needles, m. 224-5° (from MeOH), readily soluble in H2O; 1.0 mg./kg. and up gave a moderate fall of blood pressure, 7.0 mg./kg. and up caused a partial epinephrine block, 15 mg./kg. a partial TMA block; the fatal dose was above 31 mg./kg. VI refluxed 3 h. with EtI gave the VI.MeI which warmed with MeOH gave VI. XXVII in glacial AcOH hydrogenated 1 h. at 40 lb. pressure and 70° over 5% Pd-C, and the resulting semicryst., hygroscopic material triturated with EtOAc, treated in MeOH-EtOAc with dry HCl, and recrystd. from MeOH gave 5,6,7,8,15,16-hexahydro derivative of VI, colorless crystals, m. 263-5°. XX (22 g.) refluxed 4 h. in 500 cc. dry PhMe with 40 cc. POCl3, the product isolated in the usual manner, and the resulting partially crystallized material (11 g.) triturated and recrystd. with MeOH gave 4.5 g. colorless crystals, m. 157-9°; the filtrate evaporated gave a glassy residue; both products were free of N but seemed to contain a small amount nonnitrogenous impurity; λmaximum 6.22-6.27 μ (doublet); the product was presumably (3,4-C6H3CH:)2.

IT 102012-79-3, Isoquinoline, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-1-methyl- (and derivs.)

RN 102012-79-3 HCAPLUS

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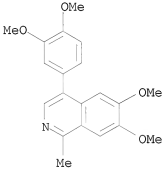

IT 6286-58-4P, Isoquinoline, 6,7-dimethoxy-1-methyl-4-phenyl-, hydrochloride 790595-06-1P, Isoquinoline, 6,7-dimethoxy-1-methyl-4-phenyl- 855717-78-1P, Isoquinolinium, 4-(3,4-dimethoxyphenyl)-2-ethyl-6,7-dimethoxy-1-methyl-, iodide RL: PREP (Preparation) (preparation of)

RN 6286-58-4 HCAPLUS

CN Isoquinoline, 6,7-dimethoxy-1-methyl-4-phenyl-, hydrochloride (9CI) (CA INDEX NAME)

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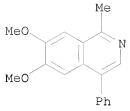

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RN 790595-06-1 HCAPLUS
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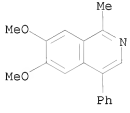
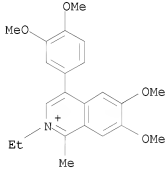


RN 855717-78-1 HCAPLUS
CN Isoquinolinium, 4-(3,4-dimethoxyphenyl)-2-ethyl-6,7-dimethoxy-1-methyl-, iodide (1:1) (CA INDEX NAME)



● I⁻

=> file caold
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

Updated Search

stn

FULL ESTIMATED COST 174.19 354.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE -23.20 -23.20

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FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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. December 31, 2008 - removed from STN

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FILE 'REGISTRY' ENTERED AT 06:01:29 ON 08 DEC 2008
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L2 15 S L1
L3 277 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 06:04:08 ON 08 DEC 2008
L4 29 S L3
L5 4 S L4 AND TROTTER, B?/AU
L6 25 S L4 NOT L5
L7 0 S L6 AND NANDA, K?/AU
L8 0 S L6 AND KETT, N?/AU
L9 0 S L6 AND DINSMORE, C?/AU
L10 0 S L6 AND PONTICELLO, G?/AU
L11 0 S L6 AND CLAREMON, D?/AU

stn

FILE 'CAOLD' ENTERED AT 06:07:28 ON 08 DEC 2008

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L12 3 L3

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L12 ANSWER 1 OF 3 CAOLD COPYRIGHT 2008 ACS on STN
AN CA52:9128d CAOLD
TI synthesis of derivs. of 4-(3',4'-dimethoxyphenyl)-6,7-dimethoxyisoquinoline
AU Quelet, Raymond; Mansouri, M.; Pineau, R.
IT 23230-74-2 87519-61-7 102010-96-8 102012-78-2
102012-79-3 102373-21-7 102597-96-6 102891-93-0
102948-36-7 103271-78-9 103271-79-0 109980-28-1 110149-36-5
111719-66-5 114399-21-2 114553-25-2 114791-79-6
114839-77-9 115387-73-0 115485-51-3

L12 ANSWER 2 OF 3 CAOLD COPYRIGHT 2008 ACS on STN
AN CA52:7320a CAOLD
TI cyclic nitrones - (II) polymers of 2,3,4,5-tetrahydropyridine-N-oxide and related compds.
AU Thesing, Jan; Mayer, H.
IT 3146-87-0 24423-87-8 34418-91-2 54105-63-4 54105-64-5
67787-56-8 86601-68-5 94269-66-6 98995-80-3 100881-81-0
101093-12-3 101273-53-4 101442-06-2 101583-92-0 102468-41-7
102593-23-7 102593-24-8 102593-25-9 102598-82-3 102890-40-4
102890-41-5 102890-42-6 102890-43-7 108757-10-4 108973-36-0
112685-68-4 116535-45-6

L12 ANSWER 3 OF 3 CAOLD COPYRIGHT 2008 ACS on STN
AN CA52:7319h CAOLD
TI syntheses of isoquinoline derivs. of pharmacol. interest
AU Deshpande, V. N.; Nargund, K. S.
IT 22251-34-9 102010-96-8 102890-46-0 102890-47-1 102952-43-2
109614-11-1 113751-11-4

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COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 11.73 365.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
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DICTIONARY FILE UPDATES:   5 DEC 2008  HIGHEST RN 1080697-25-1

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L13           1 82894-69-7/RN

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FILE COVERS 1907 - 8 Dec 2008 VOL 149 ISS 24
FILE LAST UPDATED: 7 Dec 2008 (20081207/ED)

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CA SUBSCRIBER PRICE                                     0.00     -23.20
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DICTIONARY FILE UPDATES: 5 DEC 2008 HIGHEST RN 1080697-25-1

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FILE LAST UPDATED: 7 Dec 2008  (20081207/ED)

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L16           0 L15/USES
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Updated Search

stn

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  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\adfnatit.str

L17     STRUCTURE UPLOADED

=> s l17
SAMPLE SEARCH INITIATED 06:23:22 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -       79 TO ITERATE

100.0% PROCESSED       79 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         1047 TO     2113
PROJECTED ANSWERS:               1 TO       80

L18           1 SEA SSS SAM L17

=> s l17 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
```

stn

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 06:23:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1429 TO ITERATE

100.0% PROCESSED 1429 ITERATIONS 10 ANSWERS
SEARCH TIME: 00.00.01

L19 10 SEA SSS FUL L17

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.82	553.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-23.20

FILE 'HCAPLUS' ENTERED AT 06:23:30 ON 08 DEC 2008
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FILE COVERS 1907 - 8 Dec 2008 VOL 149 ISS 24
FILE LAST UPDATED: 7 Dec 2008 (20081207/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l19/uses
3 L19
7317060 USES/RL
L20 2 L19/USES
(L19 (L) USES/RL)

=> d l20, ibib abs hitstr, 1-2

L20 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:300191 HCAPLUS
DOCUMENT NUMBER: 142:373697

stn

TITLE: Preparation of isoquinoline derivatives as potassium channel inhibitors

INVENTOR(S): Trotter, B. Wesley; Nanda, Kausik K.; Kett, Nathan R.; Dinsmore, Christopher J.; Ponticello, Gerald S.; Claremon, David A.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

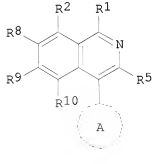
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030130	A2	20050407	WO 2004-US30486	20040917
WO 2005030130	A3	20060119		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004275720	A1	20050407	AU 2004-275720	20040917
AU 2004275720	B2	20080424		
CA 2539479	A1	20050407	CA 2004-2539479	20040917
EP 1667979	A2	20060614	EP 2004-784370	20040917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1856475	A	20061101	CN 2004-80027385	20040917
JP 2007506743	T	20070322	JP 2006-528072	20040917
IN 2006DN00877	A	20070810	IN 2006-DN877	20060220
US 20060276450	A1	20061207	US 2006-572342	20060317

PRIORITY APPLN. INFO.: US 2003-505143P P 20030923
WO 2004-US30486 W 20040917

OTHER SOURCE(S): CASREACT 142:373697; MARPAT 142:373697

GI



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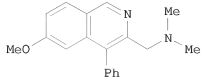


II

Updated Search

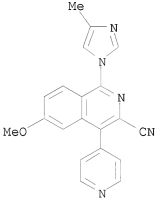
stn

AB Title compds. represented by the formula I [wherein ring A = (un)substituted (hetero)aryl or heterocyclic ring; R1 = H, CN, halo, (alkyl)amino, etc.; R2, R8-R10 = independently H, halo, aminocarbamoyl, etc.; R5 = H, halo, (cyclo)alkyl, etc.; and pharmaceutically acceptable salts, crystal forms or hydrates thereof] were prepared as potassium channel inhibitors. For example, Ni-catalyzed reduction of 1-chloro-6-methoxy-4-phenylisoquinoline-3-carbonitrile and followed by condensation with formaldehyde, gave II•2HCl. I provided ≥50% inhibition at concentration ≤33 μM in the high-throughput Kv1.5 planar patch clamp assay and ≥25% inhibition at concentration ≤25 μM in the AAS (atomic absorption spectroscopy) assay. Thus, I and their pharmaceutical comps. are useful as potassium channel inhibitors for the treatment of cardiac arrhythmias, and the like.

IT 849548-32-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinoline derivs. as potassium channel inhibitors)

RN 849548-32-9 HCAPLUS

CN 3-Isoquinolinecarbonitrile, 6-methoxy-1-(4-methyl-1H-imidazol-1-yl)-4-(4-pyridinyl)- (CA INDEX NAME)



L20 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1998:398243 HCAPLUS
DOCUMENT NUMBER:	129:81741
ORIGINAL REFERENCE NO.:	129:16880h,16881a
TITLE:	Preparation of pyridines as antiasthmatics
INVENTOR(S):	Ukita, Tatsuzo; Sugahara, Masakatsu; Ikezawa, Katsuo; Kikkawa, Hideo; Naito, Kazuaki
PATENT ASSIGNEE(S):	Tanabe Seiyaku Co., Ltd., Japan
SOURCE:	Eur. Pat. Appl., 59 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

Updated Search

stn

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 848000	A1	19980617	EP 1997-309947	19971210
EP 848000	B1	20020612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 5965730	A	19991012	US 1997-985042	19971204
TW 429257	B	20010411	TW 1997-86118300	19971205
AT 219075	T	20020615	AT 1997-309947	19971210
PT 848000	T	20020930	PT 1997-309947	19971210
ES 2178741	T3	20030101	ES 1997-309947	19971210
CA 2224635	A1	19980613	CA 1997-2224635	19971211
CA 2224635	C	20060131		
CN 1184813	A	19980617	CN 1997-125491	19971212
CN 1127498	C	20031112		
JP 10226685	A	19980825	JP 1997-342352	19971212
JP 3951395	B2	20070801		
HK 1012505	A1	20021025	HK 1998-113891	19981217
PRIORITY APPLN. INFO.:			JP 1996-333357 A	19961213
OTHER SOURCE(S):	MARPAT 129:81741			

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; A = II-VI (wherein R1, R2 = H, (un)protected OH; R31, R41, R42 = (un)protected CH2OH; R32 = H, lower alkyl, (un)protected CH2OH; R33 = (un)substituted lower alkyl; the dotted line means the presence or absence of a double bond); R5, R6 = H, (un)protected NH2, or NR5R6 = (un)substituted heterocycle], which show excellent bronchoconstriction inhibitory activity and/or anti-inflammatory activity of airways, and therefore are useful in the prophylaxis or treatment of asthma, were prepared Thus, reaction of 4-(3-pyridyl)phthalazin-1(2H)-one with 2-bromo-4-[6,7-dimethoxy-2-(4-pyridyl)methylphthalazin-1(2H)-on-4-yl]pyridine in the presence of K2CO3 and CuI in DMF afforded the title compound VII. Compds. I are effective at 0.003-3 mg/kg/day.

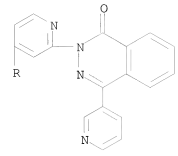
IT 209261-51-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridines as antiasthmatics)

RN 209261-51-8 HCAPLUS

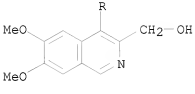
CN 1(2H)-Phthalazinone, 2-[4-[3-(hydroxymethyl)-6,7-dimethoxy-4-isoquinolinyl]-2-pyridinyl]-4-(3-pyridinyl)-, hydrochloride (1:1) (CA INDEX NAME)

Updated Search

stn



● HCl



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>
=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	94.29	647.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.60	-24.80

FILE 'CAOLD' ENTERED AT 06:42:18 ON 08 DEC 2008
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGlstRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

Updated Search

CAOLD will be discontinued and removed from associated database clusters.

. November 22, 2008 - removed from database clusters
. December 31, 2008 - removed from STN

Content previously available only in CAOLD is now available in CA/CAplus. To learn more about the options available for transferring saved search queries and answer sets to CA/CAplus, contact your STN Service Center.

```
=> d his

     (FILE 'HOME' ENTERED AT 06:01:08 ON 08 DEC 2008)

     FILE 'REGISTRY' ENTERED AT 06:01:29 ON 08 DEC 2008
L1             STRUCTURE UPLOADED
L2              15 S L1
L3             277 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 06:04:08 ON 08 DEC 2008
L4              29 S L3
L5               4 S L4 AND TROTTER, B?/AU
L6              25 S L4 NOT L5
L7               0 S L6 AND NANDA, K?/AU
L8               0 S L6 AND KETT, N?/AU
L9               0 S L6 AND DINSMORE, C?/AU
L10              0 S L6 AND PONTICELLO, G?/AU
L11              0 S L6 AND CLAREMON, D?/AU

     FILE 'CAOLD' ENTERED AT 06:07:28 ON 08 DEC 2008
L12              3 S L3

     FILE 'REGISTRY' ENTERED AT 06:19:47 ON 08 DEC 2008
                E 82894-69-7/RN
L13              1 S E3

     FILE 'HCAPLUS' ENTERED AT 06:19:59 ON 08 DEC 2008
L14              0 S L13/USES

     FILE 'REGISTRY' ENTERED AT 06:21:25 ON 08 DEC 2008
                E 374594-09-9/RN
L15              1 S E3

     FILE 'HCAPLUS' ENTERED AT 06:21:45 ON 08 DEC 2008
L16              0 S L15/USES

     FILE 'REGISTRY' ENTERED AT 06:22:28 ON 08 DEC 2008
L17             STRUCTURE UPLOADED
L18              1 S L17
L19             10 S L17 FULL

     FILE 'HCAPLUS' ENTERED AT 06:23:30 ON 08 DEC 2008
L20              2 S L19/USES

     FILE 'CAOLD' ENTERED AT 06:42:18 ON 08 DEC 2008
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stn

=> s l19
L21 0 L19

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.46 648.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -24.80

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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 5 DEC 2008 HIGHEST RN 1080697-25-1
DICTIONARY FILE UPDATES: 5 DEC 2008 HIGHEST RN 1080697-25-1

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Documents and Settings\brobinson1\My Documents\areataty.str

L22 STRUCTURE UPLOADED

=> s l22
SAMPLE SEARCH INITIATED 06:46:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 131 TO ITERATE

100.0% PROCESSED 131 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1934 TO 3306
PROJECTED ANSWERS: 1 TO 80

L23 1 SEA SSS SAM L22

Updated Search

stn

```
=> s l22 full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 177.90 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 06:46:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     2371 TO ITERATE

100.0% PROCESSED     2371 ITERATIONS                              10 ANSWERS
SEARCH TIME: 00.00.01

L24          10 SEA SSS FUL L22
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Updated Search